MARQUESAS AREA FISHERY AND ENVIRONMENTAL DATA, OCTOBER 1957 – JUNE 1958

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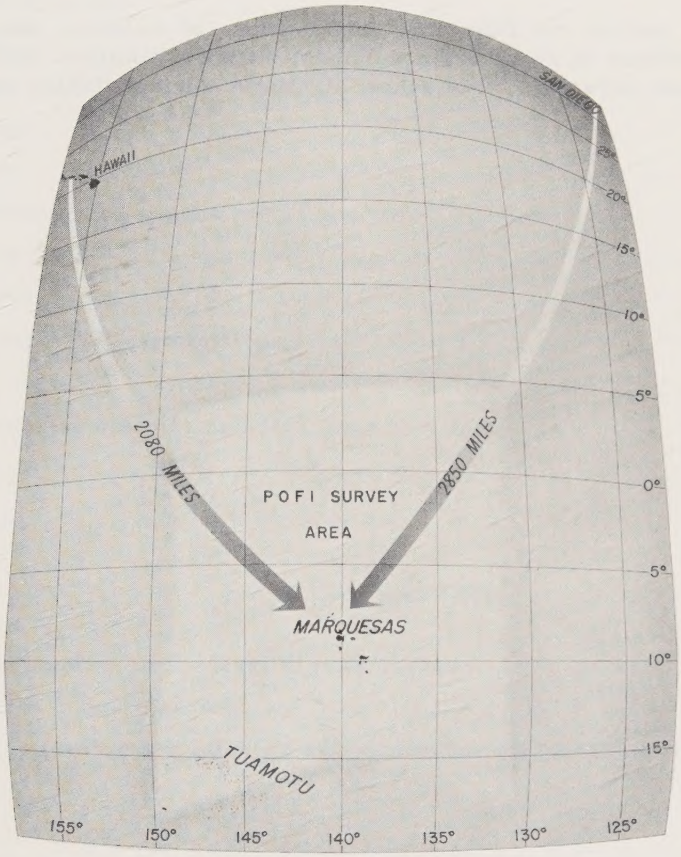

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ABSTRACT

This report presents the biological, environmental, and meteorological data from four consecutive cruises, October 1957 to June 1958, in the part of the southeastern Pacific Ocean that is centered in the Marquesas Islands. Primary mission of these cruises was to define the season of greatest availability of surface tuna schools in the Marquesas area.

Tabulated data include the following: observations of weather, water color, and water transparency; determinations of zooplankton volumes, surface salinities, and phosphates; observations at bathythermograph lowerings, tuna school sightings, surface fishing operations, and baitfish surveys.

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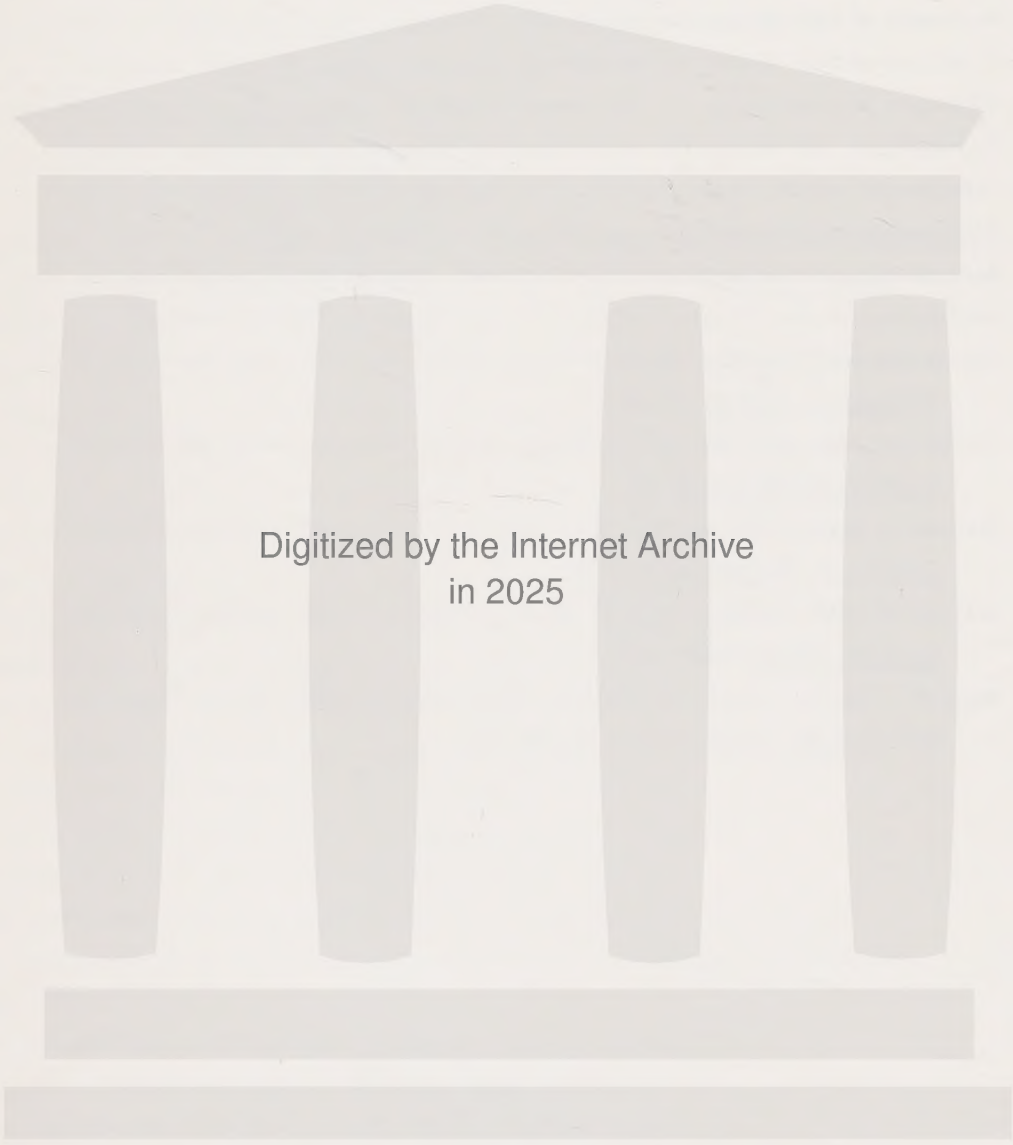

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The purpose of this report is to present the record of observed data made during four consecutive cruises in the part of the southeastern Pacific Ocean that is centered in the Marquesas Islands. The cruises were part of a program undertaken by the Pacific Oceanic Fishery Investigations (POFI) to study the tuna resources of the southeastern Pacific. It is the third POFI report which presents observed data from this area. The first (Austin 1957) contains the record of observed data made during cruises in August and September 1956. The second (Wilson and Rinkel 1957) contains results from cruises made during January-March 1957.

In order to make these data rapidly available to other agencies studying the Pacific Ocean, they are presented here without analysis. Descriptive and analytical reports will follow.

The primary mission of the four expeditions was to continue the surface tuna school surveys in the Marquesas area, with the cruises scheduled so that the season of greatest availability of tuna schools might be revealed. Secondary missions were to continue the study of the biology of the tuna and of live-bait resources in the Marquesas area, to continue the marking of tunas with the D-2 dart tag (Yamashita and Waldron 1958) and to continue studies of the abundance and distribution of tuna larvae.

Two POFI research vessels, the Charles H. Gilbert and the Hugh M. Smith, were assigned (fig. 1). In order to accomplish the primary mission, two types of surface tuna school surveys were carried out, the inshore and the offshore (fig. 2). The cruise and survey dates are listed in table 1.

In addition, another important mission was included in cruise 45 of the Smith. In cooperation with the R/V Horizon of the Scripps Institution of Oceanography, a study of the Equatorial Undercurrent was carried out during the period April 4-29, 1958, as part of the International Geophysical Year program. Preliminary results of this survey have been reported by Knauss and King (1958).

Table 1.--Marquesas Islands cruises

Vessel and cruise No.	Cruise period	Survey dates	
		Inshore	Offshore
Charles H. Gilbert 35	Oct. 2-Dec. 14, 1957	Oct. 14-20 Nov. 24-30	Oct. 24-Nov. 6
Hugh M. Smith 43	Jan. 3-Feb. 25, 1958	Jan. 18-25	Jan. 27-Feb. 12
Charles H. Gilbert 38	Feb. 7-May 2, 1958	Feb. 27-Mar. 8 April 11-19	Mar. 26-Apr. 8
Hugh M. Smith 45	Mar. 28-June 23, 1958	June 1-10	May 14-29

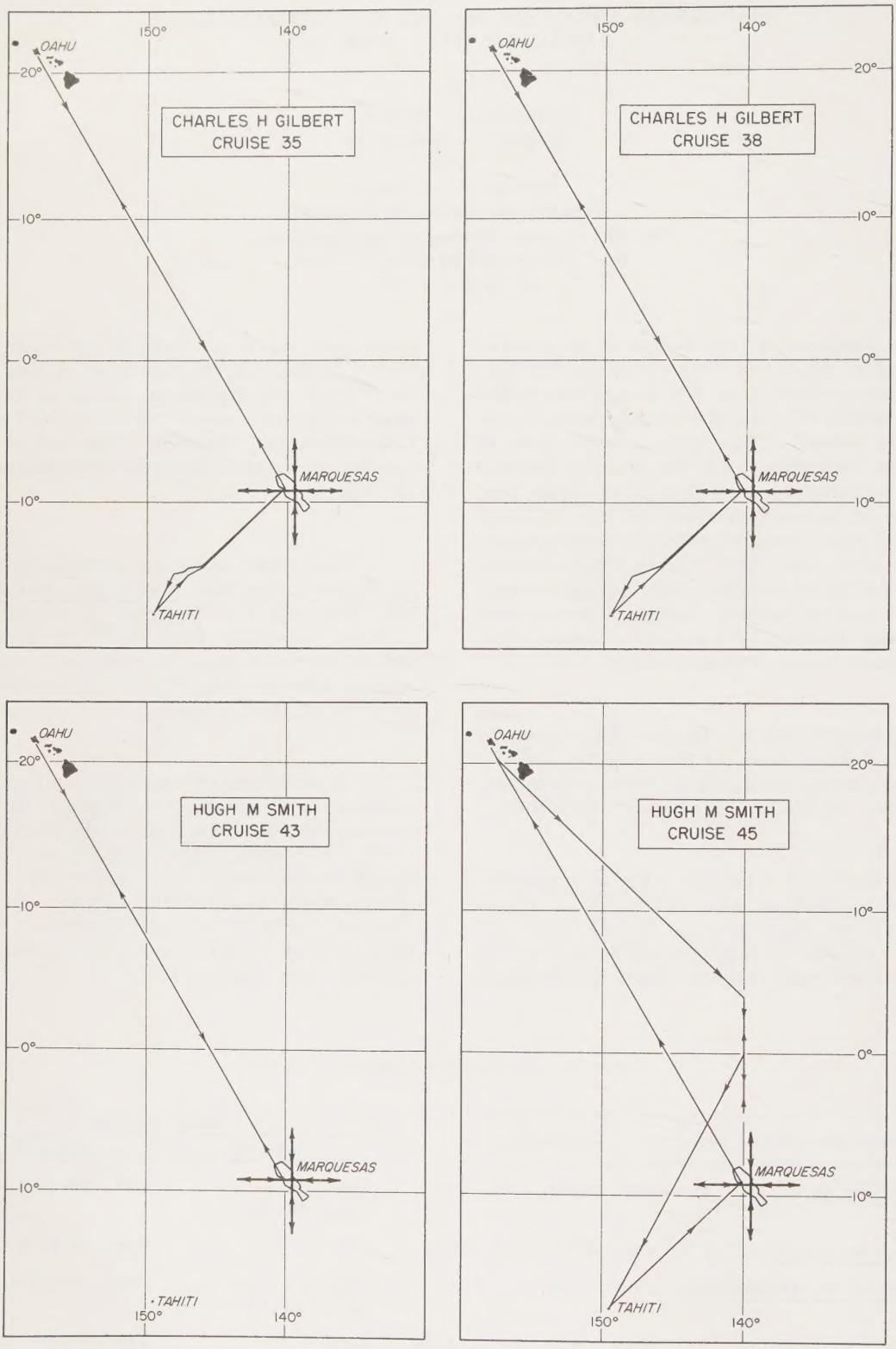

Figure 1.--Vessel tracks of four cruises.

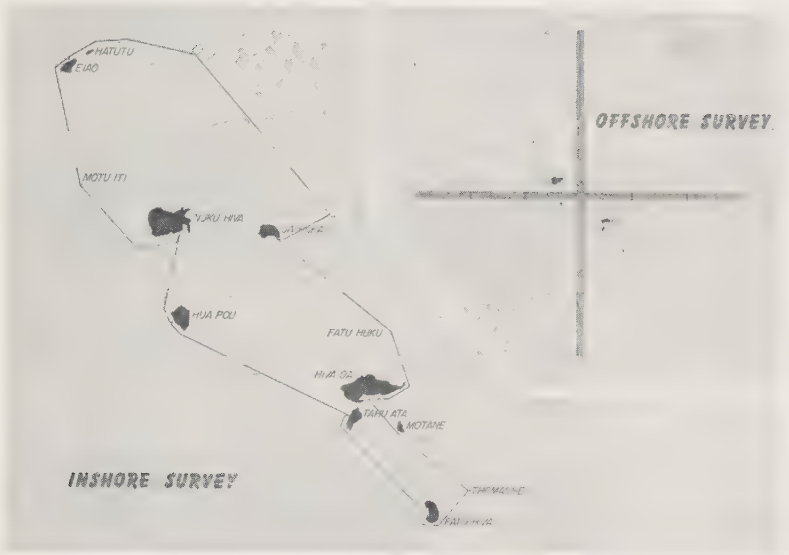

Figure 2.--Standardized inshore and offshore survey tracks, Marquesas area.

FIELD PROCEDURES

Bathythermograph and Meteorological observations

Except where noted below, bathythermograph (BT) lowerings on the four cruises were made according to the following schedule: every 6 hours between Honolulu and latitude 11°N., every 3 hours between latitude 11°N. and the Marquesas, local noon daily in the Marquesas area while on both inshore and offshore surveys, every 3 hours on the offshore survey, at each tuna fishing station, and every 6 hours on the run between Tahiti and the Marquesas.

BT lowerings during cruise 38 of the Gilbert were made every 6 hours enroute from Honolulu to the first longline fishing station at latitude 5°N., longitude 150°W. Three lowerings were made at each of the seven fishing stations; one immediately after setting, the second just prior to retrieving, and the third immediately after retrieving the longline gear. One BT lowering was made mid-way between fishing stations along 150°W. longitude (fig. 1). Aside from the foregoing deviations, BT lowerings were made following the schedule listed above.

The BT schedule followed during cruise 45 of the Smith differed only in that lowerings were made every 6 hours to latitude 4°N. on the run south from Honolulu.

Nine hundred-foot BT's were used on all the cruises. Observations made in conjunction with BT lowerings were coded according to H. O. Pub. 606-c, and recorded on Oceanographic Log Sheet B. These observations are presented in tables 2, 3, 4, and 5. The observations made during that portion of Smith cruise 45 concerned with the Undercurrent are not included here.

BT lowerings totalled 295 during Gilbert cruise 35, 263 during Smith cruise 43, 336 during Gilbert cruise 38, and 264 during Smith cruise 45.

Determinations from analyses of surface salinity and surface inorganic phosphate samples taken at BT lowerings are included in tables 2, 3, 4, and 5. Surface salinity values plus surface temperatures for locations other than BT lowerings are presented in table 10. Both the surface salinity and surface inorganic phosphate samples were returned ashore for analysis with the exception that some phosphate samples were analyzed aboard the vessel during Smith cruise 45. The phosphate samples were frozen as a means of preservation.

During the four cruises, standard weather observations were made up to 4 times daily. They were omitted when the vessels were in bays or harbors, and were made sporadically during fishing periods. The observations, as encoded according to U. S. Weather Bureau Form 1210-F, are presented in tables 6, 7, 8, and 9. Weather observations made during the Undercurrent survey portion of the Smith are not included in table 9, and will be presented elsewhere.

Productivity observations

Water color and transparency observations were made routinely at local noon daily, during survey periods in the Marquesas area. The transparency measurements were made by lowering a 30-cm. Secchi disc. The water color observations were made by comparison with the Forel standard. In addition, photometer readings were made during Smith cruise 45 at the diurnal variability station (9°34'S., 139°50'W) and between 5°S. and 10°N. on the run between the Marquesas and Honolulu. These and related data are presented in tables 11, 12, 13, and 14.

Three types of plankton hauls were made during the four cruises with a 1-meter net of 656 Nitex (aperture width 0.66 mm.), similar to that which has been described by King and Demond (1953). The purpose of these hauls was to obtain a measure of the standing crop of zooplankton, and to determine the distribution and abundance of tuna larvae. On all the four cruises, a 30-minute oblique tow to a depth of 140 meters was made each night during the runs to and from the Marquesas. During the offshore surveys in the Marquesas, two 0-140 meter tows were made nightly. During the offshore survey conducted during Gilbert cruise 35, these nightly tows were paired half-hour tows.

Upon completion of the inshore surveys conducted during all four cruises, a 24-hour plankton station was occupied at latitude 9°34'S., longitude 139°50'W. The purpose of this station was to obtain data on the diurnal variability of zooplankton and tuna larvae. Two of these stations were occupied during Gilbert cruise 35, and paired 0-140 meter half-hour tows were made every 3 hours. One station was occupied during Smith cruise 43, and a single 0-140 meter half-hour tow was made every 2 hours. Two stations were occupied during Gilbert cruise 38, and single 0-140 meter half-hour tows were made every 2 hours. At the one station occupied during Smith cruise 45, 2-net tows were made, a 1-meter open net towing in the depth range 0-140 meters and a 1-meter closing net in the depth range 140-280 meters. The latter type of net has been described by King et al. (1957). These half-hour 2-net tows were made every 2 hours.

Seven half-hour 0-140 meter hauls were made at night between the Marquesas and Tahiti, during Gilbert cruise 35. The station data and plankton volumes for hauls made during the four cruises are presented in tables 15, 16, 17, and 18.

Surface trolling

Except when otherwise engaged, the vessels did surface trolling during daylight hours with varying numbers of lines. The catches and related data for the four cruises are presented in tables 20, 21, 22, and 23. The common and scientific names of fish caught are listed in table 19.

Longline fishing

During Gilbert cruise 38 a series of seven longline fishing stations was occupied along longitude 150°W. between latitude 5°N. and 1°S. (fig. 1). At each station, 44 baskets of 11-hook longline gear were set. The gear used was of POFI design, as described by Mann (1955). Pacific herring (Clupea pallasii) was used as bait. The longline station data and catch per 100 hooks are presented in table 24; the catch record and sizes of fish in table 25.

Live-bait fishing

During the course of the inshore and offshore surveys in the Marquesas and in the Tuamotus, fishing trials with live-bait were made on tuna schools encountered. The purpose of these fishing trials was to determine the species and size of tuna in the school, to obtain material for biological studies, to continue the tagging of tunas, and to make observations of biting behavior. The live-bait fishing techniques used were similar to those of the Hawaiian skipjack fishery, as described by June (1951). The Marquesan sardine was used as bait. The station data, catches, and amount of bait used in tuna school fishing trials during the four cruises are presented in tables 26, 27, 28, and 29. The length frequency by sex of samples of yellowfin and skipjack caught during these fishing trials are given in tables 30 through 34, inclusive.

Baitfish surveys

Two procedures were used for conducting baitfish surveys in the Marquesas; daylight visual scouting and night-light fishing. Scouting during the day was done by three or four swimmers, equipped with faceplates, making a visual sweep of the shallow water in the bays, and noting the schools of bait-sized fish. The procedure and equipment used for capturing bait during the day has been described by June (1951). Night-light fishing was done with the vessels anchored in about 40-foot depth of water. Marquesan sardines of all sizes were found to be attracted to the diffused light from a floodlight, and the fish were caught alongside the vessel by using a night net of specialized design. The results of visual scouting, day and night-light fishing for the four cruises are given in tables 35 through 38, inclusive. The length frequency by sex of Marquesan sardine samples is presented in tables 39 through 42, inclusive.

Birds, tuna schools, and aquatic mammals

During daylight hours on all four cruises, a watch was maintained for birds, tuna schools, and aquatic mammals. Summaries of these observations are presented in tables 43 through 47 inclusive.

Field party personnel

Charles H. Gilbert - William T. Tanaka, Master

Cruise 35
Robert C. Wilson, Field Party Chief
Eugene L. Nakamura, Fishery Research Biologist

Cruise 38
Tamio Otsu, Field Party Chief
Howard O. Yoshida, Fishery Research Biologist

Hugh M. Smith - Barnes Collinson, Master

Cruise 43
Donald W. Strasburg, Field Party Chief
Richard N. Uchida, Fishery Research Biologist

Cruise 45
Joseph E. King, Field Party Chief
Murice O. Rinkel, Oceanographer
Richard J. Hansen, Fishery Aid
John W. Van Landingham, Physical Science Aid
Takuji Fujimura, Collaborator, Hawaii Division of Fish and Game
Stanley I. Shima, Collaborator, Hawaii Division of Fish and Game

LABORATORY PROCEDURES

Salinity and Phosphate determinations

The salinity samples were analyzed by a modification of the method of Knudsen (Van Landingham 1957). The inorganic phosphate samples were analyzed by the hydrazine sulphate modification of Denige's method (King et al. 1957).

Zooplankton

Details of the method for determining displacement volumes of zooplankton are described by King and Hida (1957).

Personnel processing samples and data
(In addition to the authors)

John W. Van Landingham, Physical Science Aid
Thomas M. Okano, Physical Science Aid
Mary Lynne M. Godfrey, Physical Science Aid
Betty Ann L. Keala, Statistical Clerk

LITERATURE CITED

AUSTIN, T. S.
1957. Summary, oceanographic and fishery data, Marquesas Islands area, August-September 1956 (EQUAPAC). U. S. Fish and Wildlife Service, Spec. Sci. Rept.--Fish. No. 217, 186 pp.

JUNE, F. C.
1951. Preliminary fisheries survey of the Hawaiian-Line Islands area. Part 3 - The live-bait skipjack fishery in the Hawaiian Islands. U. S. Fish and Wildlife Service, Comm. Fish. Rev. 13(2): 1-18.

KING, J. E., T. S. AUSTIN, and M. S. DOTY
1957. Preliminary report on expedition EASTROPIC. U. S. Fish and Wildlife Service, Spec. Sci. Rept.--Fish. No. 201, 155 pp.

_____, and JOAN DEMOND
1953. Zooplankton abundance in the central Pacific. U. S. Fish and Wildlife Service, Fish. Bull. 54(82): 111-144.

_____, and T. S. HIDA
1957. Zooplankton abundance in the central Pacific, part II. U. S. Fish and Wildlife Service, Fish. Bull. 57(118): 365-395.

KNAUSS, J. A., and J. E. KING
1958. Observations of the Pacific Equatorial Undercurrent. Nature 182: 601-602.

MANN, H. J.
1955. Construction details of improved tuna long-line gear used by Pacific Oceanic Fishery Investigations. U. S. Fish and Wildlife Service, Comm. Fish. Rev. 17(12): 1-10.

U. S. NAVY HYDROGRAPHIC OFFICE
1956. Bathythermograph observations. U. S. Navy Hydrographic Office Pub. No. 606-c, 2nd edition, 16 pp.

U. S. WEATHER BUREAU
1954. Manual of marine meteorological observations. U. S. Weather Bureau, Circular M, 9th edition, 104 pp.

VAN LANDINGHAM, J. W.
1957. A modification of the Knudsen method for salinity determination. Jour. du Conseil 22(2): 174-179.

WILSON, R. C., and M. O. RINKEL
1957. Marquesas area oceanographic and fishery data, January-March, 1957. U. S. Fish and Wildlife Service, Spec. Sci. Rept.--Fish. No. 238, 136 pp.

YAMASHITA, D. T., and K. D. WALDRON
1958. An all-plastic dart-type fish tag. Calif. Fish and Game 44(4): 311-317.

Table 2.--Observations at bathythermograph lowerings, Charles H. Gilbert cruise 35 (coded according to H. O. Pub. 606-c, second edition, 1956)

Ser. No.	Time, GCT	Date, 1957	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
1	0000	10/4	18°55'N	155°52'W	80.2	110	10	80.0	74.5	1012	03	6	4	9	3	100	1	-	-
2	0600	10/4	18°10'N	155°28'W	79.2	080	13	79.9	75.0	1015	00	8	3	6	3	100	1	-	-
3	1200	10/4	17°26'N	155°04'W	78.0	080	14	78.0	73.8	1012	00	X	X	8	3	090	1	-	-
4	1800	10/4	16°41'N	154°37'W	79.4	080	15	80.0	73.8	1013	00	8	3	9	3	090	1	-	-
5	0000	10/5	15°57'N	154°03'W	80.0	070	10	80.5	75.0	1011	02	6	4	9	3	090	1	-	-
6	0600	10/5	15°10'N	153°27'W	79.7	060	13	80.0	75.0	1012	02	8,6	3	6	3	090	1	-	-
7	1200	10/5	14°26'N	153°03'W	XXX	080	15	81.0	75.0	1010	02	8,6	3	9	3	090	1	-	-
8	1800	10/5	13°41'N	152°40'W	81.1	080	14	81.3	76.0	1012	03	8,6	8	8	3	100	1	-	-
9	0000	10/6	12°57'N	152°15'W	82.1	050	04	81.6	77.0	1010	03	8,6	8	8	3	100	1	-	-
10	0600	10/6	12°12'N	151°48'W	82.2	080	06	81.0	76.0	1012	16	8,6	8	6	2	100	1	-	-
11	1200	10/6	11°26'N	151°21'W	81.5	100	10	81.0	76.0	1011	16	8,6	8	6	2	100	1	-	-
12	1500	10/6	11°03'N	151°06'W	81.0	040	09	81.5	74.5	1011	16	8,6	8	6	2	100	1	-	-
13	1800	10/6	10°39'N	150°52'W	82.1	090	09	83.0	77.0	1012	14	8,6	8	6	2	090	1	-	-
14	2100	10/6	10°16'N	150°38'W	82.4	100	04	83.2	77.0	1013	02	8,6	8	7	2	090	1	-	-
15	0000	10/7	09°53'N	150°25'W	82.1	090	07	81.6	76.1	1010	02	8,6	8	7	2	100	1	-	-
16	0300	10/7	09°31'N	150°11'W	81.9	120	12	80.0	77.0	1010	21	8,6	8	6	2	120	1	-	-
17	0600	10/7	09°08'N	149°57'W	82.2	090	14	80.3	76.0	1012	02	6,8	8	7	2	090	1	-	-
18	0900	10/7	08°47'N	149°44'W	82.7	000	00	80.3	75.3	1012	02	6,8	8	8	2	090	1	-	-
19	1200	10/7	08°25'N	149°30'W	81.6	140	01	80.1	75.5	1010	02	8,6	8	7	2	090	1	-	-
20	1500	10/7	08°03'N	149°16'W	82.6	150	09	82.6	77.1	1010	01	8,6	6	7	2	100	1	-	-
21	1800	10/7	07°41'N	149°02'W	83.0	150	13	84.0	77.2	1010	02	8,6	5	8	2	120	1	-	-
22	2100	10/7	07°19'N	148°48'W	83.9	150	13	84.0	77.0	1012	01	6	3	9	3	150	1	-	-
23	0000	10/8	06°58'N	148°35'W	83.8	120	12	83.8	77.3	1009	02	8	5	9	3	150	1	-	-
24	0300	10/8	06°39'N	148°22'W	84.0	100	11	83.0	78.0	1010	02	8	6	9	3	140	1	-	-
25	No slide - BT damaged.																		
26	0900	10/8	06°00'N	147°57'W	82.0	120	14	81.8	76.0	1012	02	8	5	9	3	120	1	-	-
27	1200	10/8	05°40'N	147°44'W	81.8	110	10	81.8	75.3	1010	01	8	2	7	3	130	1	-	-
28	1500	10/8	05°21'N	147°31'W	81.0	120	09	81.1	75.4	1010	02	8,6	2	7	3	140	1	-	-
29	1800	10/8	05°01'N	147°18'W	81.0	130	14	82.0	76.0	1013	02	8,4	3	9	3	130	1	35.07	0.28
30	2100	10/8	04°41'N	147°06'W	81.9	140	13	83.0	76.5	1012	03	8,4	5	9	3	130	1	-	-
31	0000	10/9	04°20'N	146°54'W	81.8	150	11	82.0	74.8	1009	02	8,4	4	9	3	130	1	35.07	0.36
32	0300	10/9	03°59'N	146°45'W	81.3	140	11	81.8	74.5	1010	01	8	2	9	3	130	1	-	-
33	0600	10/9	03°38'N	146°34'W	81.2	130	10	81.3	74.0	1012	02	8	1	9	2	120	1	35.06	0.24
34	0900	10/9	03°17'N	146°22'W	80.8	140	14	81.0	75.0	1012	02	8	3	9	2	130	1	-	-
35	1200	10/9	02°55'N	146°12'W	80.4	150	11	80.0	74.0	1010	02	8,4	3	7	2	150	1	34.98	0.37

Table 2.--Observations at bathythermograph lowerings, Charles H. Gilbert cruise 35 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Ser. No.	Time, GCT	Date, 1957	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
36	1500	10/9	02°34'N	146°00'W	79.4	150	15	78.8	74.8	1011	02	8	2	7	2	150	1	-	-
37	1800	10/9	02°12'N	145°49'W	80.6	150	09	81.0	76.0	1012	02	8	1	9	2	150	1	35.04	0.31
38	2100	10/9	01°51'N	145°38'W	80.1	150	09	81.2	75.5	1012	02	8	2	9	2	150	1	-	-
39	0000	10/10	01°29'N	145°24'W	80.1	150	09	80.8	75.1	1010	03	4,8	8	9	2	140	1	35.20	0.34
40	0300	10/10	01°07'N	145°08'W	80.1	120	11	80.8	75.1	1010	01	4,8	3	9	2	140	1	-	-
41	0600	10/10	00°46'N	144°52'W	79.7	120	10	81.0	75.0	1012	02	8	1	9	2	140	1	35.30	0.41
42	0900	10/10	00°24'N	144°37'W	79.7	120	10	80.3	75.5	1012	02	8,6	2	9	2	130	1	-	-
43	1200	10/10	00°02'N	144°23'W	79.1	110	10	79.3	75.8	1010	02	8	3	7	2	140	1	35.34	0.34
44	1500	10/10	00°21'S	144°11'W	78.8	140	08	79.2	75.0	XXXX	03	4,8	6	8	2	140	1	-	-
45	1800	10/10	00°44'S	143°58'W	79.7	130	11	81.0	76.3	1012	02	8	4	9	2	140	1	35.30	0.52
46	2100	10/10	01°06'S	143°46'W	80.0	100	13	81.0	76.2	1011	02	8,6	5	9	2	130	1	-	-
47	0000	10/11	01°31'S	143°36'W	80.0	120	09	80.0	75.0	1009	02	8	3	9	2	130	1	35.35	0.36
48	0300	10/11	01°57'S	143°28'W	80.1	100	10	80.3	75.5	1010	16	8	7	9	2	130	1	-	-
49	0600	10/11	02°21'S	143°20'W	79.9	110	13	81.2	75.3	1012	03	6	8	8	2	120	1	35.40	0.38
50	0900	10/11	02°45'S	143°13'W	80.1	130	11	80.2	75.1	1012	02	8,4	8	8	2	130	1	-	-
51	1200	10/11	03°10'S	143°05'W	79.3	110	13	79.7	75.1	1012	02	8	7	7	2	130	1	35.43	0.36
52	1500	10/11	03°33'S	142°57'W	79.4	120	12	79.6	75.0	1012	01	8	3	8	2	130	1	-	-
53	1800	10/11	03°59'S	142°48'W	79.9	110	15	81.2	75.3	1014	01	X	0	9	3	120	1	35.46	0.45
54	2100	10/11	04°24'S	142°38'W	80.3	130	12	81.6	74.8	1012	01	X	0	9	3	120	1	-	-
55	0000	10/12	04°48'S	142°30'W	80.4	120	12	80.6	75.3	1009	02	X	0	9	2	120	1	35.51	0.38
56	0300	10/12	05°13'S	142°20'W	80.8	120	09	80.9	74.8	1010	02	X	0	9	2	120	1	-	-
57	0600	10/12	05°34'S	142°10'W	80.3	100	11	81.0	75.3	1012	02	X	0	9	2	120	1	35.52	0.36
58	0900	10/12	05°54'S	141°58'W	80.8	110	10	81.0	74.4	1012	03	8	3	9	2	120	1	-	-
59	1200	10/12	06°14'S	141°45'W	80.5	110	07	80.0	73.0	1011	01	8	1	7	2	120	1	35.52	0.27
60	1500	10/12	06°33'S	141°32'W	80.9	080	09	79.9	72.9	XXXX	03	8	2	9	2	120	1	-	-
61	1800	10/12	06°55'S	141°21'W	81.0	110	09	81.2	74.3	1014	01	8	1	9	2	110	1	35.58	0.38
62	2100	10/12	07°16'S	141°09'W	82.3	110	08	81.8	74.5	1013	02	8	1	9	2	110	1	-	-
63	0000	10/13	07°37'S	140°58'W	82.0	100	09	81.2	74.7	1012	02	8	1	9	2	110	1	-	0.36
64	0300	10/13	07°59'S	140°46'W	81.4	080	11	81.1	75.0	1012	02	8	2	9	2	110	1	-	-
65	0600	10/13	08°18'S	140°35'W	81.7	090	14	82.5	75.5	1013	02	8	2	9	2	110	1	35.67	0.32
66	0900	10/13	08°38'S	140°24'W	80.9	080	12	81.2	75.3	1014	02	8	1	9	2	090	1	-	-
67	2145	10/14	08°23'S	140°32'W	82.2	070	15	82.2	75.3	1013	01	8	6	8	2	070	1	35.64	0.78
68	2100	10/15	07°47'S	140°02'W	81.7	080	10	81.7	75.0	1012	15	8	5	9	2	080	1	35.51	0.30
69	2100	10/16	08°40'S	139°20'W	81.8	090	12	82.0	77.0	1011	14	8	6	9	2	090	1	35.58	0.45
70	2100	10/17	09°32'S	138°52'W	81.9	080	09	82.5	77.2	1012	15	8	6	8	2	090	1	35.71	0.28

Table 2.--Observations at bathythermograph lowerings, Charles H. Gilbert cruise 35 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Ser. No.	Time, GCT	Date, 1957	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
71	1725	10/18	10°02'S	138°50'W	81.6	120	20	81.5	76.5	1015	14	8	8	9	3	120	1	-	-
72	2110	10/18	10°15'S	138°34'W	81.8	100	18	82.1	74.8	1010	02	8	7	7	3	120	3	35.60	0.36
73	1745	10/19	10°16'S	139°06'W	82.0	110	16	81.8	74.4	1014	02	8,5	8	9	4	120	3	-	-
74	2110	10/19	09°59'S	139°11'W	82.1	110	17	82.0	74.4	1012	02	8,5	8	9	4	120	3	35.73	0.33
75	2115	10/20	09°30'S	139°56'W	82.7	120	14	83.0	75.0	1013	01	8	2	8	2	120	1	35.68	0.31
76	1630	10/21	09°33'S	139°52'W	81.8	100	15	82.0	75.0	1014	03	8	6	8	3	100	1	-	-
77	1930	10/21	09°35'S	139°52'W	82.0	090	11	82.8	73.5	1014	02	8	6	9	3	100	1	-	-
78	2230	10/21	09°34'S	139°51'W	82.1	070	11	79.0	74.9	1012	03	8	8	9	3	090	1	-	-
79	0130	10/22	09°32'S	139°48'W	81.5	210	10	81.7	74.9	1012	15	8	6	9	3	090	1	-	-
80	0430	10/22	09°34'S	139°50'W	80.4	130	12	80.9	73.6	1014	01	8	2	9	2	100	1	-	-
81	0730	10/22	09°34'S	139°51'W	81.6	060	08	81.3	74.0	1015	00	X	X	9	2	100	1	-	-
82	1030	10/22	09°32'S	139°51'W	81.5	110	08	80.8	73.3	1014	00	X	X	9	2	100	1	-	-
83	1330	10/22	09°33'S	139°50'W	80.9	100	07	80.8	74.0	1014	00	X	X	9	2	100	1	-	-
84	1800	10/24	09°06'S	139°32'W	80.7	090	16	82.2	76.0	1014	02	8	5	9	3	090	1	35.72	0.37
85	2100	10/24	09°06'S	139°11'W	81.8	090	15	83.5	76.2	1012	02	8	4	9	3	090	1	35.71	0.35
86	0000	10/25	09°08'S	138°50'W	81.7	090	13	82.2	76.3	1012	02	8	5	9	3	090	1	35.66	0.44
87	0300	10/25	09°09'S	138°28'W	80.8	090	12	82.0	76.5	1012	01	8	5	9	3	090	1	35.59	0.31
88	0600	10/25	09°13'S	138°06'W	80.3	070	09	81.2	75.7	1015	02	8	3	5	2	090	1	35.73	0.45
89	0900	10/25	09°18'S	137°48'W	81.4	060	09	80.5	75.3	1014	02	8	4	5	2	090	1	35.72	0.35
90	1315	10/25	09°23'S	137°24'W	80.1	090	10	80.4	75.4	1007	01	8	2	5	2	090	1	35.61	0.38
91	1500	10/25	09°27'S	137°08'W	80.1	090	08	80.3	75.0	1014	02	8	3	7	2	090	1	35.58	0.42
92	1800	10/25	09°22'S	136°44'W	80.3	090	12	81.3	74.3	1016	02	8	5	9	2	090	1	35.52	0.41
93	2100	10/25	09°18'S	136°22'W	81.3	090	10	81.3	74.5	1014	01	8	2	9	2	090	1	35.59	0.43
94	0000	10/26	09°16'S	136°02'W	81.0	090	09	82.2	74.5	1012	01	8,4	2	9	2	090	1	35.54	0.42
95	0300	10/26	09°16'S	135°40'W	81.0	090	12	81.2	74.0	1012	03	8	4	9	2	090	1	-	0.36
96	0600	10/26	09°15'S	136°05'W	80.6	090	12	81.7	74.7	1015	02	8	2	5	2	090	1	35.58	0.44
97	0900	10/26	09°15'S	136°17'W	80.7	090	10	80.5	73.0	1014	02	8	2	5	2	090	1	35.57	0.44
98	1315	10/26	09°14'S	136°30'W	80.4	060	12	80.4	73.9	1012	03	8	5	5	2	090	1	35.56	0.37
99	1500	10/26	09°14'S	136°48'W	80.6	090	12	81.0	73.9	1014	16	8	7	7	2	090	1	35.52	0.36
100	1820	10/26	09°14'S	137°16'W	81.3	090	09	83.0	75.0	1015	02	8	7	9	1	090	1	35.54	0.45
101	2100	10/26	09°13'S	137°37'W	82.2	090	12	82.3	76.0	1015	03	8	8	9	1	090	1	35.63	0.42
102	0000	10/27	09°16'S	138°02'W	82.0	080	10	83.0	76.0	1012	02	8	8	9	1	090	1	35.69	0.36
103	0300	10/27	09°19'S	138°28'W	81.5	080	12	81.5	75.5	1012	01	8	4	9	2	090	1	35.65	0.51
104	0600	10/27	09°18'S	138°50'W	81.1	100	12	81.1	74.1	1014	02	8	3	7	2	090	1	35.66	0.36
105	0900	10/27	09°17'S	138°58'W	81.2	080	10	79.8	75.5	1014	25	8	5	6	2	090	1	35.62	0.36

Table 2.--Observations at bathythermograph lowerings, Charles H. Gilbert cruise 35 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Ser. No.	Time, GCT	Date, 1957	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
106	1300	10/27	09°20'S	139°12'W	81.4	090	10	81.1	75.9	1012	00	X	X	6	2	090	1	35.66	0.39
107	1500	10/27	09°18'S	139°37'W	81.5	070	13	80.0	74.9	1014	15	8	6	9	2	090	1	35.62	0.30
108	1800	10/27	09°38'S	139°37'W	81.8	070	15	81.8	75.2	1015	03	8,6	7	9	3	080	1	35.73	0.37
109	2100	10/27	09°50'S	139°34'W	82.0	080	15	82.5	75.0	1013	02	8,6	8	9	3	080	1	36.46	0.38
110	0000	10/28	10°10'S	139°34'W	82.0	090	16	82.0	76.3	1012	02	8,6	5	9	3	090	1	35.78	0.31
111	0300	10/28	10°34'S	139°34'W	81.7	090	13	82.3	75.7	1013	03	4,8	5	9	3	090	1	35.78	0.29
112	0600	10/28	10°49'S	139°34'W	81.7	090	15	81.3	76.0	1015	02	8	4	7	3	090	1	35.78	0.38
113	0900	10/28	11°05'S	139°30'W	81.8	100	15	81.2	76.0	1014	25	8	4	6	3	090	1	35.76	0.32
114	1300	10/28	11°23'S	139°23'W	82.0	090	05	78.2	74.9	1014	25	8	6	5	3	090	1	35.83	0.29
115	1500	10/28	11°39'S	139°25'W	81.4	090	19	81.4	75.0	1014	15	8	6	8	3	090	1	35.87	0.48
116	1800	10/28	12°00'S	139°28'W	81.8	070	16	82.2	76.0	1016	01	8	5	9	4	090	1	35.87	0.30
117	2100	10/28	12°20'S	139°32'W	82.0	090	17	81.8	75.2	1014	02	8	5	9	4	090	1	35.89	0.31
118	0000	10/29	12°39'S	139°34'W	81.5	090	15	82.5	75.5	1013	02	8	5	9	4	090	1	36.04	0.25
119	0300	10/29	12°56'S	139°36'W	80.2	080	19	81.0	74.8	1016	02	8	4	9	4	090	1	36.14	0.23
120	0600	10/29	12°36'S	139°36'W	81.1	080	14	81.8	75.8	1015	02	8	4	6	3	090	1	36.14	0.28
121	0900	10/29	12°24'S	139°32'W	81.7	080	18	81.8	74.9	1014	02	8	4	6	3	090	1	36.08	0.38
122	1300	10/29	12°10'S	139°26'W	81.5	080	18	80.2	75.5	1014	02	8	5	6	3	090	1	36.00	0.25
123	1500	10/29	11°58'S	139°26'W	81.7	080	14	80.9	74.8	1014	15	8	7	9	3	090	1	35.98	0.26
124	1800	10/29	11°38'S	139°26'W	82.1	120	14	80.0	76.5	1015	15	8	7	7	3	100	1	35.88	0.32
125	2100	10/29	11°20'S	139°25'W	82.2	070	17	80.5	76.0	1014	02	8,6	8	8	3	090	1	35.81	0.29
126	0000	10/30	11°00'S	139°29'W	81.8	070	18	81.0	74.5	1012	02	8,6	9	7	3	090	1	35.78	0.37
127	0300	10/30	10°38'S	139°35'W	81.3	080	15	81.5	76.2	1012	02	8,6	7	8	3	090	1	35.78	0.37
128	0600	10/30	10°14'S	139°40'W	81.5	080	17	81.5	75.2	1013	02	8	5	7	2	090	1	35.77	0.27
129	1300	10/30	09°36'S	139°40'W	81.3	080	17	81.1	74.0	1011	01	8	2	7	2	090	1	35.76	0.32
130	1500	10/30	09°12'S	139°40'W	81.4	080	17	80.8	75.0	1011	02	8	2	8	2	090	1	35.73	0.40
131	1815	11/1	08°56'S	139°37'W	81.0	080	20	83.5	76.0	1014	02	8	3	8	3	080	1	35.61	0.48
132	2100	11/1	08°28'S	139°36'W	81.8	080	16	82.3	76.0	1012	03	8,6	5	8	4	080	1	35.59	0.50
133	0000	11/2	08°06'S	139°35'W	81.3	080	16	82.0	76.2	1010	03	6	7	8	4	080	1	35.59	0.59
134	0300	11/2	07°47'S	139°35'W	80.8	090	15	80.6	75.0	1010	01	8	5	8	4	080	1	35.59	0.48
135	0600	11/2	07°28'S	139°35'W	80.5	080	16	80.7	75.9	1012	02	8	4	6	4	080	1	35.55	0.55
136	0900	11/2	07°20'S	139°32'W	80.2	100	15	80.2	75.8	1011	03	8	6	6	3	080	1	35.55	0.54
137	1300	11/2	07°08'S	139°28'W	79.7	100	16	80.0	74.5	1010	02	8	4	6	3	080	1	35.57	0.44
138	1500	11/2	06°54'S	139°28'W	80.1	100	16	80.0	74.5	1011	02	8,1	3	8	3	080	1	35.57	0.49
139	1800	11/2	06°33'S	139°32'W	80.0	080	18	80.8	75.5	1012	02	8	5	8	3	080	1	35.52	0.54
140	2100	11/2	06°12'S	139°39'W	80.8	100	18	81.2	75.1	1014	02	8	5	8	3	080	1	35.53	0.60

Table 2.--Observations at bathythermograph lowerings, Charles H. Gilbert cruise 35 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Ser. No.	Time, GCT	Date, 1957	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
141	0000	11/3	05°52'S	139°40'W	80.9	080	12	80.8	75.0	1008	02	8,4	3	9	3	080	1	35.57	0.49
142	0300	11/3	05°31'S	139°40'W	80.2	090	15	80.0	75.0	1008	02	8	5	9	3	080	1	35.55	0.46
143	0600	11/3	05°48'S	139°46'W	79.7	100	15	80.3	74.8	1010	02	8	4	6	3	080	1	35.55	0.51
144	0900	11/3	06°04'S	139°49'W	79.9	100	15	80.1	75.0	1010	01	5,8	3	6	3	080	1	35.57	0.49
145	1300	11/3	06°27'S	139°50'W	79.9	110	10	79.9	74.7	1009	01	8	2	6	3	080	1	35.57	0.62
146	1500	11/3	06°41'S	139°51'W	80.0	110	10	79.9	74.9	1010	02	8	2	8	3	080	1	35.57	0.43
147	1850	11/3	07°01'S	139°56'W	80.8	080	14	82.0	76.2	1012	01	6	3	9	2	080	1	35.57	0.44
148	2100	11/3	07°17'S	139°51'W	80.8	110	12	80.0	76.5	1011	03	8,6	8	8	3	090	1	35.57	0.45
149	2330	11/3	07°32'S	139°52'W	81.0	070	12	81.2	76.2	1010	02	8	2	8	2	090	1	-	-
150	0300	11/4	08°00'S	139°36'W	80.5	090	06	82.0	76.5	1010	14	8,6	8	8	3	090	1	35.55	0.45
151	0600	11/4	08°22'S	139°31'W	80.9	100	17	81.5	75.1	1012	01	8	2	7	3	100	1	35.59	0.52
152	0900	11/4	08°38'S	139°28'W	81.0	110	13	81.0	75.7	1011	02	8	2	7	3	100	1	35.59	0.41
153	1300	11/4	08°56'S	139°41'W	81.3	090	09	80.5	74.0	1011	02	8	2	6	2	100	1	35.64	0.41
154	1500	11/4	09°10'S	139°39'W	81.0	110	12	81.0	74.9	1012	02	8	3	8	2	100	1	35.66	0.36
155	1800	11/4	09°12'S	140°00'W	81.8	090	14	84.0	75.0	1014	02	8	3	9	2	090	1	35.70	0.42
156	2100	11/4	09°13'S	140°19'W	82.2	090	12	84.0	75.0	1012	02	8	3	9	2	090	1	35.66	0.34
157	0000	11/5	09°13'S	140°36'W	82.0	090	10	84.0	75.0	1008	01	8	1	9	2	090	1	35.64	0.42
158	0215	11/5	09°13'S	140°43'W	82.0	090	12	82.0	76.0	1009	01	8	1	9	2	090	1	-	-
159	0300	11/5	09°14'S	141°00'W	81.7	100	13	81.6	75.0	1010	02	8	1	9	2	090	1	35.61	0.36
160	0600	11/5	09°14'S	141°20'W	82.0	110	15	81.3	76.0	1011	02	8	2	7	2	090	1	35.61	0.36
161	0900	11/5	09°13'S	141°40'W	81.4	090	13	80.1	74.8	1011	02	8	2	7	2	090	1	35.66	0.34
162	1300	11/5	09°15'S	142°02'W	80.3	090	15	81.3	75.0	1010	03	8	4	7	2	090	1	35.73	0.31
163	1500	11/5	09°14'S	142°19'W	82.1	090	15	81.8	74.8	1011	02	8	3	9	2	090	1	35.73	0.34
164	1800	11/5	09°13'S	142°42'W	82.5	090	15	85.0	76.2	1012	01	8	1	9	2	090	1	35.70	0.30
165	2100	11/5	09°12'S	143°06'W	83.2	090	14	85.0	75.5	1011	02	8	2	9	2	090	1	35.68	0.36
166	0000	11/6	09°11'S	143°23'W	83.1	090	09	85.0	76.0	1009	02	6	4	9	2	090	1	35.73	0.39
167	0300	11/6	09°12'S	143°18'W	82.5	090	12	83.5	76.5	1009	02	8	4	9	2	120	3	35.71	0.29
168	0600	11/6	09°14'S	143°00'W	82.0	110	14	82.5	76.0	1011	02	8	3	8	2	090	1	35.70	0.39
169	0900	11/6	09°18'S	142°42'W	82.0	100	12	82.0	75.1	1010	02	8	3	8	2	090	1	35.73	0.38
170	1300	11/6	09°18'S	142°19'W	82.0	090	12	81.8	75.0	1010	02	8	3	8	2	090	1	35.75	0.38
171	1500	11/6	09°18'S	142°06'W	82.0	090	14	81.7	75.3	1010	03	8,4	4	8	3	090	1	35.75	0.34
172	1800	11/6	09°16'S	141°47'W	81.6	080	18	82.5	75.0	1014	01	8	1	8	3	090	1	35.73	0.38
173	2100	11/6	09°16'S	141°29'W	81.2	080	13	82.7	74.8	1012	01	8	1	8	3	090	2	35.71	0.39
174	2245	11/6	09°16'S	141°22'W	82.2	080	16	82.5	74.0	1010	02	8	1	8	3	090	2	-	-
175	0000	11/7	09°16'S	141°16'W	81.4	080	09	83.8	74.2	1009	02	8	1	8	3	090	2	35.62	0.44

Table 2.--Observations at bathythermograph lowerings, Charles H. Gilbert cruise 35 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Ser. No.	Time, GCT	Date, 1957	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
176	0300	11/7	09°18'S	141°00'W	80.8	090	11	82.0	74.8	1009	02	8	1	8	3	090	2	35.61	0.45
177	0600	11/7	09°18'S	140°44'W	81.5	090	12	81.4	74.1	1011	02	8,5	2	7	3	090	2	35.62	0.46
178	0900	11/7	09°17'S	140°29'W	80.9	090	12	81.2	72.0	1010	02	8,5	2	7	3	090	2	35.62	0.35
179	1300	11/7	09°15'S	140°08'W	80.8	110	14	80.8	74.0	1009	03	8	5	7	3	090	2	35.68	0.46
180	1500	11/8	09°10'S	140°22'W	81.5	120	16	81.2	75.2	1010	02	8	2	8	2	090	2	-	-
181	1800	11/8	09°26'S	140°41'W	81.7	110	16	83.0	76.0	1012	02	8	5	9	3	110	2	35.70	0.49
182	0000	11/9	10°02'S	141°20'W	82.4	110	16	82.8	75.5	1008	01	8	2	9	2	150	2	35.75	0.31
183	0600	11/9	10°46'S	141°55'W	81.4	110	16	83.0	76.5	1010	02	8	2	9	2	130	2	35.79	0.26
184	1200	11/9	11°28'S	142°23'W	82.0	110	18	81.5	75.5	1009	02	8	2	7	2	140	2	35.77	0.30
185	1800	11/9	12°08'S	143°01'W	82.6	080	11	83.0	77.2	1012	02	8	5	9	2	130	2	35.81	0.30
186	0000	11/10	12°44'S	143°47'W	83.7	070	11	84.8	77.0	1009	01	8,1	2	9	2	130	2	35.79	0.26
187	0600	11/10	13°20'S	144°28'W	82.7	070	09	84.8	76.0	1010	00	X	X	9	1	100	1	35.79	0.48
188	1200	11/10	13°51'S	145°00'W	82.3	080	07	81.9	75.8	1010	02	8	2	7	1	100	1	35.85	0.26
189	1800	11/10	14°18'S	145°52'W	82.8	000	00	82.2	76.0	1012	15	8	7	7	1	090	1	36.01	0.20
190	2215	11/10	14°29'S	146°05'W	83.5	040	04	84.1	76.1	1010	01	8	2	9	1	090	1	-	-
191	1800	11/11	14°39'S	146°19'W	83.4	140	07	83.4	77.0	1012	02	8,4	2	9	1	000	0	35.88	0.25
192	0000	11/12	14°52'S	147°02'W	84.0	130	13	83.5	75.0	1010	03	8	5	9	1	130	1	35.93	0.22
193	1800	11/12	14°55'S	148°02'W	83.7	080	14	83.8	77.0	1013	02	8,6	3	9	1	100	1	36.27	0.21
194	0000	11/13	15°01'S	147°57'W	83.0	150	16	82.5	76.2	1011	02	8	3	9	1	150	1	36.24	0.19
195	0320	11/13	14°56'S	147°38'W	82.3	140	11	82.5	75.4	1011	02	8,6	2	9	2	100	1	-	-
196	1800	11/13	15°13'S	148°00'W	82.5	140	15	81.9	75.3	1012	25	8	5	9	1	150	1	36.25	0.25
197	0000	11/14	15°52'S	148°16'W	82.0	120	12	82.0	74.0	1010	15	8,5	6	9	1	150	1	36.33	0.23
198	0600	11/14	16°28'S	148°48'W	80.5	110	14	80.0	72.5	1012	00	X	X	9	1	110	1	36.36	0.23
199	1200	11/14	17°02'S	149°08'W	79.3	130	15	79.5	72.8	1010	01	8	3	9	1	120	1	36.32	0.17
200	0000	11/19	17°22'S	149°22'W	81.1	040	08	81.4	77.0	1010	15	8	6	8	1	070	1	36.27	0.22
201	0600	11/19	16°50'S	148°47'W	81.2	020	08	83.0	78.0	1012	00	X	9	2	2	070	1	36.36	0.18
202	1200	11/19	16°20'S	148°14'W	81.3	040	08	81.1	76.5	1010	00	X	5	5	2	070	1	36.42	0.22
203	1800	11/19	15°47'S	147°38'W	82.0	050	08	83.0	74.0	1012	01	8	3	9	2	080	1	36.32	0.22
204	2150	11/19	15°37'S	147°25'W	82.4	050	10	83.5	76.6	1011	02	8	3	9	2	080	1	-	-
205	0000	11/20	15°21'S	147°04'W	83.1	050	10	83.2	76.9	1009	02	8,1	5	9	1	050	1	36.13	0.23
206	0600	11/20	14°58'S	146°21'W	82.5	050	08	80.0	76.2	1010	16	X	5	7	1	070	1	35.95	0.29
207	1200	11/20	14°36'S	145°40'W	82.9	040	04	81.1	75.1	1009	00	X	6	5	1	070	1	36.04	0.27
208	1800	11/20	14°03'S	145°04'W	82.3	060	13	79.0	75.0	1012	16	8,6	7	6	1	070	1	-	0.29
209	0000	11/21	13°29'S	144°30'W	84.0	350	06	82.2	76.8	1009	02	8,5	6	8	1	000	1	35.95	0.31
210	0600	11/21	12°54'S	143°56'W	82.6	040	09	83.0	76.0	1012	01	X	X	8	1	000	1	35.77	0.23

Table 2.--Observations at bathythermograph lowerings, Charles H. Gilbert cruise 35 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Ser. No.	Time, GCT	Date, 1957	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
211	1200	11/21	12°22'S	143°22'W	82.9	040	12	82.3	75.1	1010	01	8	2	5	2	000	1	35.72	0.31
212	1800	11/21	11°46'S	142°48'W	82.0	030	13	83.2	76.5	1012	02	8	2	9	2	040	1	35.85	0.27
213	0000	11/22	11°12'S	142°13'W	83.1	030	09	83.5	75.6	1010	02	8,5	3	9	2	040	1	35.95	0.72
214	0600	11/22	10°37'S	141°40'W	82.3	080	12	83.0	76.3	1012	02	X	3	9	2	060	1	35.84	0.30
215	1200	11/22	10°04'S	141°08'W	82.5	080	11	81.9	76.0	1011	02	X	4	5	2	050	1	35.85	0.29
216	1800	11/22	09°28'S	140°35'W	82.0	070	13	81.0	76.2	1013	02	8,6	3	9	2	050	1	35.79	0.29
217	2120	11/24	08°21'S	140°38'W	82.1	040	18	83.1	76.9	1011	03	8,6	8	7	2	050	3	-	-
218	2328	11/24	08°12'S	140°41'W	82.5	040	13	83.1	76.5	1009	01	8,6	6	7	2	050	3	-	-
219	2045	11/25	07°52'S	140°10'W	82.1	060	16	82.1	75.1	1011	01	8	2	9	3	060	1	-	-
220	0000	11/26	08°01'S	139°44'W	81.9	060	14	81.9	75.4	1009	02	8	3	9	3	060	1	35.75	0.34
221	2120	11/26	08°51'S	139°13'W	82.6	050	12	84.5	77.0	1011	02	8	3	9	2	060	1	-	-
222	0030	11/27	08°59'S	139°30'W	82.1	070	17	82.5	76.0	1009	02	8	3	9	2	070	1	35.70	0.36
223	2115	11/27	09°42'S	138°47'W	82.6	040	14	82.6	75.5	1011	02	8	3	9	2	040	1	-	-
224	2125	11/28	10°00'S	138°51'W	83.5	050	05	82.2	75.6	1010	01	8	4	9	1	000	0	-	-
225	2330	11/28	10°08'S	138°50'W	82.8	100	09	84.0	76.8	1010	03	8	6	9	1	120	1	-	-
226	2045	11/29	10°02'S	139°09'W	83.4	100	04	84.5	76.0	1010	02	8	3	9	1	140	1	-	-
227	2130	11/30	09°38'S	139°41'W	83.4	050	11	83.1	76.8	1010	02	8	4	9	2	080	1	-	-
228	0000	12/1	09°24'S	139°56'W	83.1	050	10	82.9	76.2	1008	01	8	2	9	1	060	1	35.71	0.36
229	1500	12/1	09°34'S	139°49'W	81.4	080	09	81.4	75.0	1009	02	8	2	9	1	060	1	-	-
230	1800	12/1	09°33'S	139°51'W	81.5	060	07	82.9	75.1	1011	02	8	2	9	1	060	1	-	-
231	2100	12/1	09°34'S	139°52'W	83.1	070	07	83.3	75.5	1010	02	8	2	9	1	070	1	-	-
232	0000	12/2	09°34'S	139°50'W	83.5	040	07	83.5	76.2	1008	02	8	2	9	1	080	1	-	-
233	0300	12/2	09°34'S	139°50'W	83.9	080	09	82.5	76.0	1010	03	8	4	9	1	080	1	-	-
234	0600	12/2	09°34'S	139°50'W	82.0	070	09	81.1	75.7	1012	03	8,6	4	9	1	080	1	-	-
235	0900	12/2	09°31'S	139°52'W	81.7	090	10	80.9	74.5	1012	03	8,6	7	9	1	090	1	-	-
236	1200	12/2	09°34'S	139°52'W	81.8	030	12	81.0	75.9	1010	01	8,6	2	9	1	080	1	-	-
237	1800	12/4	07°54'S	140°42'W	82.0	090	18	82.5	76.0	1014	03	8,4	4	9	1	090	1	35.64	0.43
238	2100	12/4	07°30'S	140°54'W	82.5	070	14	82.5	76.0	1012	03	8,5	6	9	1	090	1	-	-
239	0000	12/5	07°08'S	141°08'W	82.2	050	13	83.0	76.0	1010	02	8,5	7	9	1	050	1	35.68	0.29
240	0300	12/5	06°46'S	141°22'W	82.4	050	13	82.4	75.9	1011	02	8,4	7	9	2	050	1	-	-
241	0600	12/5	06°24'S	141°37'W	81.8	060	13	82.0	76.0	1013	01	8	2	9	2	060	1	35.64	0.37
242	0900	12/5	06°02'S	141°52'W	81.9	060	14	81.3	76.0	1013	02	8	2	9	2	060	1	-	-
243	1200	12/5	05°42'S	142°04'W	81.3	050	17	81.1	76.2	1011	03	8	5	7	2	060	1	35.64	0.36
244	1500	12/5	05°20'S	142°19'W	81.2	050	16	81.2	76.0	1012	02	8,4	6	8	2	050	1	-	-
245	1800	12/5	04°55'S	142°30'W	81.5	090	19	82.2	76.6	1014	02	8,4	4	9	3	060	1	35.62	0.42

Table 2.--Observations at bathythermograph lowerings, Charles H. Gilbert cruise 35 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Ser. No.	Time, GCT	Date, 1957	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
246	2100	12/5	04°32'S	142°44'W	82.2	090	20	82.2	76.5	1013	02	8	4	9	3	080	1	-	-
247	0000	12/6	04°11'S	142°58'W	82.3	080	13	82.5	76.5	1010	02	8,5	6	9	2	070	1	35.62	0.44
248	0300	12/6	03°50'S	143°11'W	82.1	080	12	82.1	76.8	1011	02	8,5	5	8	2	070	1	-	-
249	0600	12/6	03°27'S	143°21'W	81.9	060	15	82.2	76.5	1012	01	8	2	9	2	070	1	35.52	0.34
250	0900	12/6	03°02'S	143°30'W	82.0	060	13	82.0	77.0	1014	02	8,6	2	9	2	070	1	-	-
251	1200	12/6	02°38'S	143°38'W	81.8	070	13	81.8	76.0	1012	02	8	4	7	2	070	1	35.50	0.42
252	1500	12/6	02°14'S	143°47'W	81.8	070	15	81.8	76.0	1012	03	8,5	6	8	2	070	1	-	-
253	1800	12/6	01°50'S	143°56'W	82.1	080	16	83.0	77.0	1014	02	8	4	9	3	090	1	35.35	0.37
254	2100	12/6	01°26'S	144°05'W	83.0	070	15	83.2	76.8	1013	02	8	4	9	3	090	1	-	-
255	0000	12/7	01°02'S	144°15'W	83.0	090	16	83.2	77.0	1011	03	8,5	6	9	3	090	1	35.34	0.37
256	0300	12/7	00°38'S	144°27'W	81.8	150	16	80.2	75.5	1012	15	8,5	7	9	3	130	1	-	-
257	0600	12/7	00°15'S	144°38'W	81.8	130	07	78.0	77.1	1014	21	8,6	8	5	3	130	1	35.12	0.35
258	0900	12/7	00°08'N	144°49'W	81.7	120	11	81.5	77.5	1014	02	8,6	6	8	3	130	1	-	-
259	1200	12/7	00°27'N	144°59'W	81.9	130	14	81.9	76.1	1012	01	8,6	4	7	3	130	1	35.03	0.33
260	1500	12/7	00°48'N	145°12'W	82.0	120	16	81.4	76.1	1013	01	8,1	4	8	2	130	1	-	-
261	1800	12/7	01°09'N	145°26'W	82.3	140	14	83.2	76.0	1014	03	8,4	6	8	3	140	1	35.03	0.23
262	2100	12/7	01°30'N	145°40'W	83.0	130	11	84.8	77.9	1013	02	8,4	6	8	3	140	1	-	-
263	0000	12/8	01°52'N	145°54'W	83.1	120	13	82.9	77.0	1011	02	8,4	5	9	3	130	1	35.03	0.42
264	0300	12/8	02°14'N	146°09'W	82.5	130	11	82.9	77.1	1012	02	8,4	4	9	2	130	1	-	-
265	0600	12/8	02°36'N	146°24'W	82.0	130	09	83.0	77.5	1014	02	8,4	6	9	3	130	1	35.01	0.39
266	0900	12/8	02°58'N	146°39'W	82.2	130	08	84.8	78.0	1014	02	8	4	9	3	130	1	-	-
267	1200	12/8	03°19'N	146°52'W	82.5	110	10	81.5	76.8	1012	15	8,5	6	7	2	130	1	35.05	0.35
268	1500	12/8	03°42'N	147°08'W	82.0	110	09	81.8	77.2	1012	15	8,5	6	7	2	130	1	-	-
269	1800	12/8	04°05'N	147°23'W	82.0	120	10	78.8	76.3	1014	21	8,5	8	7	2	130	1	35.10	0.44
270	2100	12/8	04°28'N	147°38'W	82.5	100	10	83.0	77.0	1013	01	8,5	6	8	2	100	2	-	-
271	0000	12/9	04°50'N	147°50'W	82.9	090	05	82.1	77.9	1010	03	8,5	8	8	2	110	1	35.12	0.38
272	0300	12/9	05°14'N	148°02'W	82.8	060	09	81.8	77.5	1010	02	8,5	7	8	2	070	1	-	-
273	0600	12/9	05°37'N	148°12'W	82.2	070	07	82.0	77.2	1012	01	6,8	6	9	2	040	1	-	-
274	0900	12/9	06°00'N	148°24'W	83.0	060	06	82.2	76.0	1012	01	8	3	9	2	040	1	-	-
275	1200	12/9	06°21'N	148°34'W	83.5	050	07	81.5	75.5	1010	02	8	4	7	2	060	1	-	-
276	1500	12/9	06°44'N	148°46'W	83.4	090	06	81.3	75.1	1010	02	8	4	7	2	060	1	-	-
277	1800	12/9	07°07'N	148°57'W	82.8	060	06	83.5	76.0	1012	02	8,4,1	4	9	2	060	2	-	-
278	2100	12/9	07°30'N	149°08'W	83.8	060	09	82.8	76.0	1011	02	8,4,1	4	9	2	060	2	-	-
279	0000	12/10	07°53'N	149°22'W	83.5	060	12	80.5	77.1	1009	16	8,4	7	8	2	020	2	-	-
280	0300	12/10	08°16'N	149°36'W	82.9	070	14	80.9	76.9	1010	16	8,4	7	8	3	050	2	-	-

Table 2.--Observations at bathythermograph lowerings, Charles H. Gilbert cruise 35 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Ser. No.	Time, GCT	Date, 1957	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
281	0600	12/10	08°39'N	149°51'W	82.1	060	16	81.0	76.5	1011	00	X	X	8	3	060	2	-	-
282	0900	12/10	09°03'N	150°06'W	81.8	060	15	81.8	76.5	1012	02	8,6	6	8	3	060	4	-	-
283	1200	12/10	09°24'N	150°19'W	82.0	060	13	81.0	76.4	1010	02	8,5	5	5	3	050	4	-	-
284	1500	12/10	09°48'N	150°34'W	81.0	070	16	81.0	76.5	1011	02	8,4	7	5	3	060	4	-	-
285	1800	12/10	10°11'N	150°48'W	80.5	070	15	81.2	76.5	1013	03	8,4	8	7	2	020	4	-	-
286	2100	12/10	10°36'N	151°03'W	81.8	060	15	82.0	77.0	1012	02	8	6	7	2	030	4	-	-
287	0000	12/11	10°57'N	151°18'W	80.9	080	16	81.1	77.3	1010	02	8,4	6	9	3	030	4	-	-
288	0300	12/11	11°18'N	151°34'W	80.5	080	13	80.7	77.3	1010	02	8,5	7	8	3	050	4	-	-
289	0600	12/11	11°39'N	151°51'W	80.0	080	17	81.5	76.0	1012	00	X	X	9	3	050	4	-	-
290	0900	12/11	12°02'N	152°08'W	80.0	070	19	80.5	77.0	1014	02	8	4	9	3	050	4	-	-
291	1200	12/11	12°21'N	152°23'W	80.1	060	19	80.1	76.1	1011	02	4,8	7	7	3	040	4	-	-
292	1800	12/11	13°06'N	152°57'W	79.8	060	18	80.0	76.0	1012	02	8,4	6	9	2	050	4	-	-
293	0000	12/12	13°50'N	153°30'W	80.1	050	17	80.1	76.0	1011	03	8,5	7	9	2	050	4	-	-
294	0600	12/12	14°35'N	153°56'W	79.2	060	22	79.0	74.0	1014	00	X	X	8	2	050	4	-	-
295	1200	12/12	15°20'N	154°22'W	77.9	040	24	77.0	73.0	1013	03	8	8	5	4	050	4	-	-
296	No slide																		
297	0000	12/13	16°49'N	155°16'W	77.8	050	22	76.5	69.1	1012	02	8,4	8	6	5	050	4	-	-

Table 3.--Observations at bathythermograph lowerings, Hugh M. Smith cruise 43 (coded according to H. O. Pub. 606-c, second edition, 1956)

Ser. No.	Time, GCT	Date, 1958	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
1	2100	1/3	21°26'N	158°16'W	76.0	340	21	75.3	66.7	1019	80	8	6	8	4	340	4	34.76	-
2	2335	1/3	21°25'N	158°39'W	75.5	010	21	75.5	65.5	1016	01	8	2	8	4	350	4	34.74	-
3	0225	1/4	21°25'N	159°00'W	74.7	350	29	73.0	63.0	1016	02	8	2	8	5	350	4	34.79	-
4	0415	1/4	21°35'N	159°00'W	74.3	360	25	70.5	63.5	1017	03	8	6	7	5	350	4	34.78	-
5	0645	1/4	21°35'N	158°42'W	74.0	010	25	68.2	63.0	1018	03	X	X	5	6	320	6	34.85	-
6	0845	1/4	21°35'N	158°24'W	74.2	360	31	69.3	63.3	1019	02	X	X	7	6	XXX	X	34.74	-
7	1400	1/4	21°52'N	157°58'W	72.8	360	26	67.8	59.6	1017	02	8	6	7	5	350	4	34.76	-
8	1620	1/4	22°04'N	158°00'W	72.7	350	23	68.7	60.3	1019	02	X	X	7	5	350	4	34.78	-
9	1855	1/4	22°20'N	158°02'W	72.7	340	29	66.2	61.2	1019	80	8	8	6	5	340	4	35.14	-
10	2015	1/4	22°18'N	157°53'W	72.5	350	22	68.3	60.0	1021	02	8	7	7	5	350	4	35.14	-
11	2240	1/4	21°56'N	157°58'W	73.1	360	21	69.0	61.0	1017	02	4,8	7	7	5	350	4	35.19	-
12	0200	1/5	21°36'N	157°46'W	73.5	360	19	70.0	60.8	1017	15	8	7	7	4	330	4	35.10	-
13	1815	1/5	19°30'N	156°36'W	74.8	030	20	72.0	65.0	1018	01	4,8	3	8	3	340	3	-	-
14	0000	1/6	18°43'N	156°08'W	76.4	360	07	73.8	66.4	1016	02	4,8	3	8	2	340	1	-	-
15	0600	1/6	18°05'N	155°46'W	75.5	060	19	73.9	65.4	1017	03	X	X	7	3	020	1	-	-
16	1200	1/6	17°18'N	155°15'W	75.9	030	21	73.7	65.7	1018	80	4,8	4	7	3	350	X	-	-
17	1800	1/6	16°33'N	154°47'W	76.0	050	15	71.2	67.5	1018	01	4,8	6	7	3	050	2	-	-
18	0000	1/7	15°48'N	154°22'W	76.2	070	15	74.6	68.6	1016	01	8	4	7	3	020	2	-	-
19	0600	1/7	15°03'N	153°57'W	77.1	060	19	75.5	68.7	1017	01	8	2	7	3	040	1	-	-
20	1200	1/7	14°26'N	153°31'W	76.9	060	16	75.8	70.6	1016	15	8,4	5	7	3	030	1	-	-
21	1800	1/7	13°40'N	153°02'W	77.3	040	17	76.3	71.8	1016	01	0,6	2	7	4	040	1	-	-
22	0000	1/8	12°58'N	152°32'W	78.5	070	17	77.4	72.2	1013	03	6,8	3	7	4	030	1	-	-
23	0600	1/8	12°13'N	152°12'W	78.6	060	18	78.2	73.8	1014	01	X	X	6	4	060	1	-	-
24	1200	1/8	11°35'N	151°53'W	78.3	080	16	78.2	74.0	1013	01	8	2	7	3	050	1	-	-
25	1800	1/8	10°51'N	151°32'W	78.5	070	18	79.0	74.0	1014	01	4,8	3	7	4	070	1	-	-
26	2100	1/8	10°32'N	151°22'W	79.0	080	19	79.0	73.8	1014	01	8	2	7	4	070	1	-	-
27	0000	1/9	10°06'N	151°10'W	79.3	070	18	79.7	73.8	1010	02	1	2	7	4	060	1	-	-
28	0300	1/9	09°44'N	150°58'W	79.9	070	18	79.8	74.8	1011	03	8,9	3	7	4	070	1	-	-
29	0600	1/9	09°24'N	150°46'W	80.5	070	19	80.3	75.1	1012	01	X	X	7	4	070	1	-	-
30	0900	1/9	09°08'N	150°34'W	80.8	070	21	80.4	74.7	1012	02	X	X	7	4	070	1	-	-
31	1200	1/9	08°47'N	150°21'W	79.2	080	19	79.5	74.0	1011	03	4	7	7	4	070	1	-	-
32	1500	1/9	08°26'N	150°08'W	81.2	070	19	80.0	73.1	1012	01	8	2	7	4	070	1	-	-
33	1800	1/9	08°06'N	149°53'W	81.4	070	24	81.0	74.0	1012	01	4,8	3	7	5	070	1	-	-
34	2100	1/9	07°46'N	149°38'W	81.8	060	24	81.2	74.8	1012	03	1,8	4	7	5	070	3	-	-
35	0000	1/10	07°25'N	149°23'W	82.3	060	18	81.6	75.7	1010	03	8,4,2	6	7	5	070	3	-	-

Table 3.--Observations at bathythermograph lowerings, Hugh M. Smith cruise 43 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Ser. No.	Time, GCT	Date, 1958	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
36	0300	1/10	07°04'N	149°12'W	82.4	050	20	81.9	75.5	1010	03	2, 4, 8	7	7	3	070	3	-	-
37	0600	1/10	06°42'N	149°00'W	81.7	040	19	81.8	76.8	1011	03	8	7	7	4	070	3	-	-
38	0900	1/10	06°28'N	148°48'W	82.3	030	23	81.8	76.7	1012	02	X	X	7	4	070	3	-	-
39	1200	1/10	06°06'N	148°36'W	82.8	030	20	78.3	77.3	1010	25	X	9	5	3	070	3	-	-
40	1500	1/10	05°45'N	148°24'W	82.8	040	17	79.2	77.8	1011	80	X	9	5	3	070	1	-	-
41	1800	1/10	05°25'N	148°12'W	82.3	080	19	77.2	75.5	1013	63	0, 8	8	4	3	070	3	-	-
42	2100	1/10	05°04'N	147°58'W	82.5	050	10	78.1	77.0	1012	80	0, 8	8	5	3	070	3	34.45	0.13
43	0000	1/11	04°44'N	147°47'W	82.5	040	18	79.0	77.0	1010	02	0, 8	8	5	3	070	3	-	-
44	0300	1/11	04°22'N	147°34'W	83.0	080	16	81.5	78.2	1010	02	0, 8	8	5	3	070	3	34.78	0.18
45	0600	1/11	04°00'N	147°21'W	82.4	100	18	83.1	77.0	1011	02	0, 8	8	5	3	110	3	-	-
46	0900	1/11	03°44'N	147°12'W	83.0	120	19	82.7	77.3	1012	01	X	X	5	3	XXX	X	34.99	0.14
47	1200	1/11	03°24'N	147°00'W	82.4	120	17	82.1	76.2	1010	00	X	X	5	3	XXX	X	-	-
48	1500	1/11	03°03'N	146°48'W	82.0	130	18	82.0	76.5	1010	03	6, 8	7	5	3	110	1	34.99	0.11
49	1800	1/11	02°42'N	146°36'W	82.3	130	17	82.4	77.3	1012	00	6	8	6	3	110	1	-	-
50	2100	1/11	02°22'N	146°23'W	82.5	110	17	83.2	77.5	1012	02	0, 1, 4, 8	7	7	3	110	1	34.94	0.21
51	0000	1/12	02°02'N	146°12'W	82.6	120	15	82.7	76.0	1009	02	1, 4, 8	7	7	3	110	1	-	-
52	0300	1/12	01°42'N	146°05'W	82.4	120	14	82.5	76.6	1009	01	1, 8	3	7	3	110	1	35.05	0.23
53	0600	1/12	01°22'N	145°55'W	82.0	110	19	81.8	77.0	1011	01	X	2	6	3	120	1	-	-
54	0915	1/12	01°02'N	145°47'W	81.4	110	16	81.3	75.5	1011	00	X	X	X	8	XXX	X	35.17	0.18
55	1200	1/12	00°41'N	145°38'W	81.6	110	18	81.0	75.5	1010	00	X	X	X	8	XXX	X	-	-
56	1500	1/12	00°20'N	145°28'W	81.7	110	11	80.7	75.3	1010	01	2, 8	2	7	3	120	1	35.28	0.43
57	1800	1/12	00°04'S	145°18'W	81.9	100	14	82.4	76.3	1012	03	1, 8	5	7	3	090	1	-	-
58	2100	1/12	00°28'S	145°08'W	81.5	110	17	82.3	76.0	1010	02	1, 8	2	7	3	110	1	35.34	0.32
59	0000	1/13	00°50'S	144°56'W	82.2	110	17	82.5	75.7	1008	02	1, 8	2	7	3	090	1	-	-
60	0300	1/13	01°12'S	144°44'W	82.3	090	12	82.5	76.0	1090	03	1, 8	3	7	3	090	1	35.37	0.17
61	0600	1/13	01°35'S	144°32'W	82.2	110	11	81.7	75.8	1010	01	X	2	6	3	110	1	-	-
62	0900	1/13	01°53'S	144°22'W	82.3	100	10	81.8	76.3	1011	02	X	X	7	3	110	1	35.37	0.31
63	1200	1/13	02°15'S	144°09'W	82.2	110	11	81.2	76.0	1010	02	X	X	7	3	110	1	-	-
64	1500	1/13	02°38'S	143°57'W	82.3	110	10	81.5	76.5	1010	02	2, 8, 9	2	7	2	110	1	35.48	0.30
65	1800	1/13	03°00'S	143°45'W	82.2	130	14	82.6	76.6	1012	02	8, 1	3	7	2	100	1	-	-
66	2100	1/13	03°22'S	143°33'W	82.8	120	12	81.8	75.5	1010	02	8	2	7	2	110	1	35.46	0.52
67	0000	1/14	03°45'S	143°19'W	83.1	090	12	82.5	76.5	1009	02	8	2	7	3	100	1	-	-
68	0300	1/14	04°09'S	143°04'W	83.0	090	12	82.2	76.2	1009	02	8	2	7	3	100	1	35.43	0.42
69	0600	1/14	04°32'S	142°49'W	82.8	090	11	82.1	76.5	1010	02	X	2	7	3	110	1	-	-
70	0900	1/14	04°51'S	142°36'W	82.4	110	10	81.8	76.5	1012	02	X	X	7	3	110	1	35.62	0.10

Table 3.--Observations at bathythermograph lowerings, Hugh M. Smith cruise 43 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Ser. No.	Time, GCT	Date, 1958	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
71	1200	1/14	05°17'S	142°20'W	82.4	110	08	81.5	76.2	1010	00	X	X	7	3	110	1	-	-
72	1500	1/14	05°39'S	142°05'W	82.3	080	09	81.5	76.0	1010	02	8	2	7	2	100	1	35.66	0.38
73	1800	1/14	06°05'S	141°52'W	82.7	070	11	83.5	77.4	1012	02	1	2	7	2	110	1	-	-
74	2100	1/14	06°30'S	141°39'W	83.0	080	09	82.8	76.8	1011	02	8	2	8	2	100	1	35.70	0.30
75	0000	1/15	06°56'S	141°27'W	83.4	070	11	82.8	76.8	1009	02	8	2	8	2	100	1	-	-
76	0300	1/15	07°23'S	141°14'W	82.8	060	11	82.8	76.8	1010	02	8	2	8	2	100	1	35.66	0.30
77	0600	1/15	07°47'S	141°02'W	82.8	070	11	82.8	76.8	1012	02	X	2	7	2	100	1	-	-
78	0900	1/15	08°13'S	140°47'W	82.8	080	09	82.2	76.5	1012	02	X	X	8	2	XXX	X	35.61	0.27
79	1200	1/15	08°38'S	140°29'W	82.8	070	11	82.0	76.2	1010	00	X	X	7	2	XXX	X	-	-
80	2015	1/18	08°34'S	140°38'W	83.7	050	18	85.6	78.6	1008	03	2,1,8	6	8	3	080	1	-	-
81	2100	1/18	08°30'S	140°40'W	83.8	050	18	86.0	78.8	1008	03	2,8	6	8	3	080	1	35.75	0.26
82	0125	1/19	08°05'S	140°45'W	84.0	060	13	87.7	77.8	1005	01	2,1,8	5	8	3	080	1	-	-
83	2110	1/19	07°51'S	140°14'W	82.8	040	14	82.7	76.5	1008	02	8,5	4	8	4	070	1	35.70	0.09
84	2110	1/20	08°53'S	139°12'W	83.1	040	15	85.2	77.0	1008	01	2,8	6	8	4	070	1	35.70	0.30
85	2015	1/21	09°22'S	138°58'W	83.5	060	16	84.5	77.3	1011	01	2,8	3	8	3	070	1	35.71	-
86	2200	1/21	09°29'S	138°52'W	83.4	060	14	85.4	76.2	1010	01	8,5	2	8	3	070	1	35.79	0.21
87	2040	1/22	10°04'S	138°53'W	83.3	040	12	84.2	76.3	1012	03	8,2	6	9	3	080	2	-	-
88	2100	1/23	09°58'S	139°24'W	83.5	020	11	85.3	77.0	1014	15	0,2,5,8	6	7	2	030	1	35.75	0.30
89	0115	1/24	09°35'S	139°51'W	84.2	040	07	83.2	76.2	1011	03	0,4,8	7	8	2	080	1	-	-
90	0315	1/24	09°32'S	139°50'W	83.8	060	10	82.9	76.5	1012	02	6,8	6	8	2	080	1	-	-
91	0500	1/24	09°35'S	139°50'W	83.7	060	08	85.0	77.8	1013	02	X	X	6	1	080	1	-	-
92	0700	1/24	09°34'S	139°50'W	83.4	060	08	83.4	76.7	1013	02	X	X	6	2	080	1	-	-
93	0900	1/24	09°34'S	139°50'W	83.2	050	09	82.6	75.4	1013	02	X	X	6	2	080	1	-	-
94	1100	1/24	09°34'S	139°50'W	84.5	070	10	84.0	77.8	1012	02	X	X	6	2	080	1	-	-
95	1300	1/24	09°34'S	139°49'W	83.3	070	12	80.5	75.8	1012	00	X	X	6	2	080	1	-	-
96	1500	1/24	09°34'S	139°50'W	82.9	060	08	80.2	75.0	1012	03	6,8	7	7	2	080	1	-	-
97	1700	1/24	09°34'S	139°50'W	83.6	030	05	82.1	76.8	1014	01	1,8	6	7	2	080	1	-	-
98	1900	1/24	09°34'S	139°50'W	83.7	050	13	84.0	77.5	1013	02	1,6,8	6	7	3	060	1	-	-
99	2100	1/24	09°34'S	139°50'W	84.1	040	10	85.0	77.8	1013	01	1,2,8	4	7	2	070	1	35.82	0.17
100	2300	1/24	09°34'S	139°50'W	84.5	050	08	86.0	78.1	1011	02	1,8	4	7	2	080	1	-	-
101	1810	1/25	09°09'S	140°08'W	83.9	080	08	84.0	76.8	1012	01	1,8	5	7	2	080	1	-	-
102	0300	1/28	09°12'S	139°38'W	83.8	070	12	84.6	77.2	1010	01	1,2,8	6	9	3	090	2	35.79	0.19
103	0600	1/28	09°12'S	139°17'W	83.8	090	14	84.0	76.9	1012	00	X	X	6	3	090	2	35.82	0.23
104	0900	1/28	09°12'S	139°02'W	83.3	080	18	78.6	75.3	1012	81	X	X	5	3	090	2	35.86	0.19
105	1200	1/28	09°12'S	138°48'W	83.3	090	15	82.8	76.2	1010	00	X	X	5	3	090	2	35.84	0.40

Table 3.--Observations at bathythermograph lowerings, Hugh M. Smith cruise 43 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Ser. No.	Time, GCT	Date, 1958	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
106	1500	1/28	09°12'S	138°28'W	82.8	070	14	82.5	76.7	1010	00	8,5,1	3	7	3	080	2	35.79	0.20
107	1800	1/28	09°15'S	138°06'W	83.0	060	17	83.0	77.0	1012	02	4,6	6	7	3	080	2	35.82	0.28
108	2100	1/28	09°18'S	137°50'W	83.1	070	16	81.8	76.8	1011	03	4,6	7	7	3	080	2	35.77	0.30
109	0000	1/29	09°20'S	137°28'W	83.2	080	10	83.4	76.7	1010	15	4,8,3	6	7	3	090	2	35.71	0.29
110	0115	1/29	09°17'S	137°25'W	83.2	080	11	84.8	77.3	1009	01	4,8	5	7	3	090	2	-	-
111	0300	1/29	09°12'S	137°11'W	83.1	120	13	82.8	77.6	1010	02	8,6,2	5	7	3	090	2	35.75	0.21
112	0600	1/29	09°10'S	136°50'W	83.0	080	14	82.5	77.3	1011	00	X	X	6	3	080	3	35.73	0.35
113	0900	1/29	09°10'S	136°33'W	83.0	150	10	82.4	76.2	1011	00	X	X	6	3	080	3	35.71	0.19
114	1200	1/29	09°10'S	136°18'W	82.7	080	10	81.0	76.5	1010	00	X	X	6	3	080	3	35.71	0.28
115	1500	1/29	09°10'S	136°00'W	82.2	360	12	79.5	75.6	1011	00	6,4,8	8	6	3	070	2	35.70	0.13
116	1800	1/29	09°10'S	136°25'W	82.8	010	11	82.0	77.3	1011	02	4,6,8	6	7	2	080	2	35.71	0.31
117	2100	1/29	09°10'S	136°44'W	83.9	040	08	87.0	78.8	1012	01	4,6	4	7	2	080	2	35.70	0.38
118	0000	1/30	09°09'S	137°06'W	82.8	110	27	77.6	74.7	1011	61	0	8	5	4	090	3	35.71	0.19
119	0300	1/30	09°12'S	137°08'W	82.2	110	32	81.0	75.3	1011	01	0,4,3	7	6	5	120	4	35.71	0.21
120	0600	1/30	09°12'S	137°29'W	82.7	090	26	83.0	76.0	1010	02	X	X	6	5	120	4	35.75	0.28
121	0900	1/30	09°12'S	137°49'W	83.2	030	14	82.9	77.3	1010	02	X	7	5	4	120	4	35.71	0.42
122	1200	1/30	09°12'S	138°10'W	83.0	090	15	83.5	77.0	1009	00	X	X	6	4	120	4	35.73	0.22
123	1500	1/30	09°12'S	138°31'W	83.3	110	09	82.5	77.5	1011	15	4,8,3	5	7	2	150	4	35.71	0.18
124	1800	1/30	09°12'S	138°56'W	83.5	160	10	82.7	77.0	1012	15	8,6,4,5	7	7	2	130	4	35.82	0.31
125	2100	1/30	09°12'S	139°21'W	83.8	050	16	83.2	78.0	1013	02	4	8	7	3	080	4	35.81	0.30
126	0000	1/31	09°09'S	139°36'W	83.9	030	06	82.0	77.1	1011	15	0,8,5	7	7	3	100	4	35.82	0.17
127	0200	1/31	09°05'S	139°36'W	83.8	090	12	82.0	77.2	1010	01	2,5	5	7	3	100	4	-	-
128	0300	1/31	09°12'S	139°38'W	83.5	090	12	81.6	76.3	1011	01	2,4,8	2	8	3	100	4	35.68	0.14
129	0600	1/31	09°37'S	139°40'W	83.8	060	16	81.5	77.0	1012	00	X	X	6	3	100	4	35.81	0.28
130	0900	1/31	09°55'S	139°40'W	83.4	070	12	81.6	77.2	1012	00	X	X	6	3	100	4	35.75	0.30
131	1200	1/31	10°14'S	139°38'W	83.5	080	14	81.6	76.2	1010	00	X	X	6	3	100	4	35.86	0.20
132	1500	1/31	10°30'S	139°38'W	83.3	090	12	82.1	77.4	1012	00	8	2	7	2	100	4	35.82	0.20
133	1800	1/31	10°54'S	139°40'W	83.5	090	16	83.6	78.5	1012	01	8	5	7	3	100	4	35.86	0.33
134	2100	1/31	11°16'S	139°43'W	83.5	090	18	83.8	77.2	1011	01	1,8	4	7	3	100	4	-	0.12
135	0000	2/1	11°36'S	139°45'W	83.9	080	20	83.6	77.7	1010	02	8,1	5	7	4	090	4	-	0.15
136	0300	2/1	11°58'S	139°46'W	83.8	080	17	83.5	78.3	1010	01	8,1	2	7	3	090	4	35.88	0.18
137	0600	2/1	12°02'S	139°36'W	84.0	060	16	83.5	77.3	1011	01	8	2	6	3	070	4	35.86	0.17
138	0900	2/1	12°20'S	139°36'W	83.5	080	12	83.1	76.7	1012	02	8	2	6	3	080	4	35.97	0.19
139	1200	2/1	12°31'S	139°34'W	83.6	080	15	82.5	76.4	1010	00	X	X	6	3	080	4	35.91	0.19
140	1500	2/1	12°52'S	139°32'W	83.4	090	09	82.2	76.1	1012	03	1,8	5	7	3	090	4	35.91	0.18

Table 3.--Observations at bathythermograph lowerings, Hugh M. Smith cruise 43 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Ser. No.	Time, GCT	Date, 1958	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
141	1800	2/1	12°42'S	139°40'W	83.8	080	15	84.5	77.2	1012	01	1,8	4	7	3	080	4	35.95	0.20
142	1905	2/1	12°31'S	139°40'W	84.0	100	17	85.3	79.4	1012	03	4,8	6	7	3	080	4	-	-
143	2100	2/1	12°16'S	139°40'W	84.1	080	12	86.0	78.0	1011	01	4,8	3	7	3	080	4	35.86	0.18
144	0000	2/2	11°55'S	139°39'W	84.0	060	12	88.1	78.5	1010	03	2,1,8	6	7	3	080	4	35.93	0.20
145	0300	2/2	11°37'S	139°42'W	84.0	060	14	85.0	76.3	1010	01	8	2	7	3	060	4	35.97	0.18
146	0600	2/2	11°16'S	139°42'W	83.9	060	10	85.0	77.2	1011	03	8	3	6	3	060	4	36.00	0.19
147	0900	2/2	11°02'S	139°41'W	84.0	060	12	83.7	77.4	1012	01	8	2	6	3	060	4	35.84	0.07
148	1200	2/2	10°43'S	139°39'W	84.0	070	12	83.2	77.0	1010	02	8	2	6	3	070	4	35.82	0.22
149	1500	2/2	10°27'S	139°38'W	83.0	070	11	82.1	77.3	1011	02	8	2	6	2	070	4	35.88	0.20
150	1800	2/2	10°02'S	139°39'W	83.9	050	12	84.0	77.2	1012	03	4,8	3	7	2	070	4	35.82	0.30
151	2100	2/2	09°36'S	139°40'W	83.7	080	14	82.7	76.5	1012	15	6,4,8	7	8	3	050	4	35.81	-
152	0000	2/3	09°13'S	139°40'W	84.3	070	13	85.7	78.6	1010	02	8,2,6,5	4	9	2	070	2	35.73	-
153	1500	2/5	09°12'S	139°39'W	XXX	090	14	83.1	77.0	1011	01	1,8	2	9	2	090	2	-	-
154	1800	2/5	09°12'S	140°03'W	83.0	100	18	82.7	76.4	1012	00	8,1	3	8	3	090	3	-	0.28
155	2100	2/5	09°12'S	140°30'W	83.8	080	16	87.6	77.8	1011	01	8,1	2	9	3	090	3	35.77	0.20
156	0000	2/6	09°11'S	140°48'W	84.1	090	21	85.0	77.3	1009	02	1,8	2	9	3	090	3	35.84	0.22
157	0300	2/6	09°06'S	140°48'W	84.0	090	18	86.0	79.0	1009	03	1,8	3	9	3	090	3	35.86	0.19
158	0600	2/6	09°07'S	141°05'W	83.9	090	20	83.4	76.8	1010	02	X	X	7	3	100	3	35.75	0.10
159	0900	2/6	09°07'S	141°21'W	84.0	090	18	84.0	78.2	1010	00	X	X	7	3	090	3	35.84	0.23
160	1200	2/6	09°08'S	141°32'W	83.9	110	18	83.3	76.9	1010	02	8,1	3	7	3	100	3	35.81	0.23
161	1500	2/6	09°08'S	141°48'W	84.0	130	19	83.2	77.8	1010	01	1,8	3	7	3	130	3	35.86	0.17
162	1815	2/6	09°07'S	142°12'W	84.0	090	17	85.4	78.5	1012	03	8	4	7	3	100	3	35.79	0.20
163	2100	2/6	09°03'S	142°30'W	84.3	100	13	85.6	78.5	1011	01	8	3	7	3	100	3	35.79	0.11
164	0000	2/7	09°06'S	142°55'W	84.8	100	16	85.0	77.2	1008	01	8	3	7	3	100	3	35.75	0.30
165	0300	2/7	09°12'S	143°25'W	84.7	100	16	85.0	78.1	1008	02	8	3	7	3	100	3	35.77	0.20
166	0600	2/7	09°13'S	143°02'W	84.1	100	16	84.4	77.3	1010	00	X	X	7	3	100	3	35.71	0.19
167	0900	2/7	09°14'S	142°43'W	84.1	090	14	85.0	77.3	1010	00	X	X	6	3	090	3	35.68	0.30
168	1200	2/7	09°15'S	142°26'W	83.9	090	14	83.5	77.3	1010	00	X	X	7	3	090	3	35.68	0.22
169	1500	2/7	09°16'S	142°04'W	83.7	090	20	83.8	76.0	1010	02	1,8	3	7	3	090	3	35.77	0.22
170	1800	2/7	09°15'S	141°43'W	83.9	100	21	84.2	77.6	1010	02	8	3	7	4	090	4	35.79	0.23
171	2100	2/7	09°14'S	141°24'W	84.1	100	18	85.5	77.7	1008	01	8,1	1	7	4	090	4	35.77	0.17
172	0000	2/8	09°12'S	141°16'W	84.0	080	18	85.3	78.8	1006	03	8	4	7	4	090	4	35.81	0.19
173	0300	2/8	09°12'S	141°00'W	84.0	090	18	84.8	78.3	1007	02	8	4	7	4	090	4	35.86	0.11
174	0600	2/8	09°13'S	140°41'W	83.7	090	16	83.7	77.7	1008	00	X	X	7	4	090	4	35.88	0.05
175	0900	2/8	09°14'S	140°24'W	84.0	090	16	84.0	78.5	1009	00	X	X	7	4	090	4	35.82	0.40

Table 3.--Observations at bathythermograph lowerings, Hugh M. Smith cruise 43 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Ser. No.	Time, GCT	Date, 1958	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
176	1200	2/8	09°16'S	140°06'W	83.2	110	17	83.4	77.5	1008	00	8,3	3	7	3	090	4	35.84	0.13
177	1500	2/8	09°13'S	139°46'W	83.5	080	18	82.8	77.0	1009	02	8	3	7	3	080	4	35.77	0.17
178	1500	2/9	09°12'S	139°38'W	83.0	070	15	82.5	77.2	1009	02	8	4	7	2	070	3	35.79	0.30
179	1650	2/9	08°56'S	139°40'W	83.2	070	15	84.0	77.3	1010	01	8	3	7	2	070	3	-	-
180	1800	2/9	08°46'S	139°40'W	83.2	080	17	83.7	77.4	1010	02	8	3	8	2	080	1	35.79	0.38
181	2100	2/9	08°17'S	139°40'W	83.5	090	18	85.6	79.3	1008	03	8	5	8	3	080	4	35.77	0.18
182	0000	2/10	07°58'S	139°40'W	84.0	080	17	86.5	78.0	1006	02	8	5	8	3	080	4	35.79	0.33
183	0300	2/10	07°57'S	139°41'W	83.7	080	16	85.0	78.1	1007	02	8	4	7	3	080	3	35.79	0.33
184	0600	2/10	07°35'S	139°40'W	83.3	070	20	83.7	77.9	1009	02	X	X	7	3	080	3	35.81	0.39
185	0900	2/10	07°17'S	139°39'W	83.4	060	16	84.0	78.0	1009	00	X	X	7	3	070	3	35.71	0.35
186	1200	2/10	06°55'S	139°40'W	83.1	070	13	82.6	77.6	1008	01	8	2	7	3	080	3	35.70	0.14
187	1500	2/10	06°36'S	139°39'W	82.8	070	14	82.8	78.2	1010	03	8	6	7	2	070	3	35.64	-
188	1800	2/10	06°12'S	139°36'W	82.8	090	18	84.4	78.6	1011	02	8	2	7	3	060	3	35.62	0.13
189	2100	2/10	05°56'S	139°28'W	83.1	090	14	85.8	78.5	1010	01	8	1	7	3	060	3	35.59	0.12
190	2340	2/10	05°58'S	139°44'W	83.3	090	12	85.6	78.7	1008	02	8	2	7	3	080	3	35.59	0.43
191	0400	2/11	05°18'S	139°50'W	83.0	080	15	84.0	79.0	1008	03	1,8	3	7	3	080	3	35.50	0.18
192	0600	2/11	05°37'S	139°48'W	82.8	110	13	83.1	78.4	1010	80	X	X	7	3	080	3	-	0.26
193	0900	2/11	05°59'S	139°43'W	82.7	110	13	83.0	78.1	1010	00	X	X	7	3	110	3	35.52	0.40
194	1200	2/11	06°21'S	139°38'W	82.9	110	10	82.3	77.2	1009	03	4,8	7	7	3	090	3	35.53	0.13
195	1500	2/11	06°42'S	139°34'W	82.2	110	12	82.5	78.2	1010	03	8	7	7	3	090	3	35.62	0.24
196	1800	2/11	07°06'S	139°34'W	83.2	080	14	84.5	78.3	1012	01	8	1	7	3	090	3	35.62	0.21
197	2100	2/11	07°28'S	139°34'W	83.7	100	11	84.7	78.7	1011	15	8,6	3	7	2	090	3	35.70	0.43
198	0000	2/12	07°53'S	139°36'W	83.7	100	14	83.5	78.8	1009	13	6,8	6	7	2	090	3	35.77	0.23
199	0330	2/12	08°14'S	139°39'W	84.1	130	14	83.8	79.5	1010	01	6,8	3	7	3	090	3	35.77	0.21
200	0600	2/12	08°30'S	139°40'W	83.5	110	13	83.0	78.3	1011	00	X	X	7	3	090	3	35.77	0.20
201	0900	2/12	08°46'S	139°41'W	83.5	110	12	83.2	77.2	1011	00	X	X	6	3	090	3	35.79	0.18
202	1200	2/12	09°03'S	139°45'W	83.3	070	17	83.3	76.5	1010	01	1	8	7	3	090	3	35.81	0.19
203	0300	2/16	08°38'S	140°27'W	84.3	060	16	85.4	78.2	1003	01	8,6	3	7	3	060	3	35.81	-
204	0600	2/16	08°19'S	140°39'W	84.0	070	15	85.0	78.6	1008	01	X	X	6	3	060	3	-	-
205	0900	2/16	07°56'S	140°56'W	84.2	080	17	85.0	78.8	1008	00	X	X	6	3	080	3	35.77	0.22
206	1200	2/16	07°35'S	141°09'W	83.8	070	17	83.3	77.8	1008	02	X	X	6	3	070	3	-	-
207	1500	2/16	07°13'S	141°23'W	83.8	090	22	83.1	77.2	1008	03	8	4	7	4	070	3	35.77	0.45
208	1800	2/16	06°48'S	141°36'W	83.7	090	19	84.3	77.5	1009	01	8	2	7	4	090	3	-	-
209	2100	2/16	06°23'S	141°49'W	83.6	100	22	85.0	77.0	1008	01	8	1	7	4	080	3	35.73	0.41
210	0000	2/17	05°58'S	142°02'W	83.7	080	17	85.3	76.5	1006	01	8	1	7	4	060	3	-	-

Table 3.--Observations at bathythermograph lowerings, Hugh M. Smith cruise 43 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Ser. No.	Time, GCT	Date, 1958	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
211	0300	2/17	05°35'S	142°15'W	83.4	080	15	85.4	77.3	1006	02	8	1	7	4	060	3	35.71	0.36
212	0600	2/17	05°16'S	142°25'W	83.1	090	18	83.7	77.0	1008	02	X	X	6	4	080	3	-	-
213	0900	2/17	04°53'S	142°38'W	82.8	130	14	84.0	77.8	1009	00	X	X	6	4	090	3	35.61	0.30
214	1200	2/17	04°30'S	142°52'W	82.8	100	17	82.5	77.2	1008	02	X	3	6	4	090	3	-	-
215	1500	2/17	04°06'S	143°05'W	82.7	110	15	82.8	77.6	1008	03	0,8	7	6	3	090	3	35.53	0.49
216	1830	2/17	03°40'S	143°20'W	82.8	130	13	84.5	77.8	1010	01	1,8	1	7	3	130	3	-	-
217	2100	2/17	03°21'S	143°33'W	82.9	100	17	85.8	78.5	1009	01	0,4,8	2	7	3	100	3	35.48	0.48
218	0000	2/18	02°56'S	143°46'W	82.8	110	15	83.6	77.3	1007	03	4,5,8	6	7	3	080	3	-	-
219	0300	2/18	02°27'S	144°00'W	82.7	100	15	84.6	78.4	1007	01	8	1	7	3	070	3	35.52	0.40
220	0600	2/18	02°07'S	144°08'W	82.3	110	15	83.0	78.1	1008	01	X	1	6	3	080	3	-	-
221	0900	2/18	01°41'S	144°23'W	82.0	110	14	83.2	78.4	1009	00	X	X	6	3	080	3	35.43	0.25
222	1200	2/18	01°15'S	144°38'W	82.3	100	13	82.2	77.7	1008	00	X	X	6	3	080	3	-	-
223	1500	2/18	00°50'S	144°52'W	82.2	120	14	82.0	77.5	1008	03	0,8	2	6	3	080	3	35.44	0.30
224	1800	2/18	00°23'S	145°06'W	81.7	120	12	83.0	78.4	1010	03	6	6	6	3	100	3	-	-
225	2100	2/18	00°04'N	145°20'W	82.3	070	18	82.7	79.2	1010	16	0,8,9	3	7	3	090	3	35.37	0.50
226	0000	2/19	00°31'N	145°33'W	82.0	100	15	83.3	79.4	1008	15	5,4,8	7	6	3	110	3	-	-
227	0300	2/19	00°57'N	145°46'W	82.2	080	18	83.7	78.5	1008	01	4,5,8	6	7	3	080	3	35.35	0.28
228	0600	2/19	01°22'N	145°59'W	82.5	090	21	83.0	78.2	1009	01	X	2	6	4	090	3	-	-
229	1200	2/19	02°07'N	146°16'W	82.5	100	18	82.5	77.7	1008	01	X	2	6	4	090	3	-	-
230	1500	2/19	02°33'N	146°28'W	82.7	120	14	83.6	78.0	1009	00	X	X	6	3	120	3	35.43	0.71
231	1800	2/19	02°58'N	146°40'W	82.9	110	17	84.8	79.0	1010	03	0,4,6,8	3	7	4	110	3	-	-
232	2100	2/19	03°26'N	146°51'W	82.8	100	19	86.3	79.6	1010	15	8,4,9	2	7	4	080	3	35.10	0.28
233	0000	2/20	03°50'N	147°02'W	83.8	100	14	86.2	79.8	1008	02	4,8	2	7	4	100	3	-	-
234	0300	2/20	04°15'N	147°12'W	83.2	090	17	80.0	78.0	1008	63	X	9	5	4	100	3	34.88	0.21
235	0600	2/20	04°40'N	147°23'W	82.7	100	09	80.6	76.8	1010	80	X	X	5	4	100	3	-	-
236	0900	2/20	04°59'N	147°28'W	82.8	060	19	82.5	79.0	1010	01	X	X	6	4	070	3	-	-
237	1200	2/20	05°24'N	147°38'W	82.8	070	19	82.5	78.5	1009	01	X	2	6	4	080	3	-	-
238	1500	2/20	05°50'N	147°49'W	82.6	070	16	82.4	77.9	1010	00	X	X	6	4	070	3	-	-
239	1800	2/20	06°15'N	147°59'W	82.7	070	16	83.6	78.4	1011	03	2,8,9	3	7	4	070	3	-	-
240	2100	2/20	06°40'N	148°08'W	82.6	080	17	85.2	78.3	1012	02	8	3	7	4	070	3	-	-
241	0000	2/21	07°04'N	148°18'W	83.2	070	18	82.5	77.8	1010	03	8	7	7	4	070	3	-	-
242	0300	2/21	07°27'N	148°27'W	83.2	080	14	83.6	78.5	1010	01	4,6,9	3	7	4	070	3	-	-
243	0600	2/21	07°49'N	148°37'W	82.1	080	20	82.8	76.5	1012	00	X	X	6	4	080	3	-	-
244	0900	2/21	08°10'N	148°50'W	81.8	080	18	81.8	76.4	1012	01	8	2	6	4	080	3	-	-
245	1200	2/21	08°35'N	149°08'W	81.6	090	16	81.5	75.6	1012	01	X	2	6	4	080	3	-	-

Table 3.--Observations at bathythermograph lowerings, Hugh M. Smith cruise 43 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Ser. No.	Time, GCT	Date, 1958	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
246	1500	2/21	09°02'N	149°28'W	81.0	100	15	81.0	75.8	1012	00	X	X	6	3	080	3	-	-
247	1800	2/21	09°26'N	149°42'W	81.3	090	15	82.6	75.6	1014	02	4,8	2	7	3	070	3	-	-
248	2100	2/21	09°52'N	149°56'W	81.0	090	17	83.7	76.1	1015	02	8	2	7	3	080	3	-	-
249	0000	2/22	10°16'N	150°10'W	81.8	090	14	84.0	76.5	1012	01	8	1	7	3	080	3	-	-
250	0300	2/22	10°41'N	150°26'W	81.6	100	13	84.0	76.9	1012	02	8	2	8	3	080	3	-	-
251	0600	2/22	11°06'N	150°42'W	80.0	100	17	82.2	76.2	1014	00	X	X	7	3	080	3	-	-
252	1200	2/22	11°55'N	151°01'W	78.3	060	12	79.0	74.7	1015	00	X	X	7	3	060	3	-	-
253	1800	2/22	12°49'N	151°26'W	78.0	100	11	80.4	74.7	1016	01	8,1	2	7	2	070	1	-	-
254	0000	2/23	13°42'N	151°57'W	79.0	080	07	80.2	74.2	1014	02	8	2	7	2	080	1	-	-
255	0600	2/23	14°29'N	152°31'W	79.4	080	05	80.8	74.7	1015	02	X	2	6	2	090	1	-	-
256	1200	2/23	15°11'N	153°01'W	78.4	020	04	78.8	73.5	1015	00	X	X	6	2	XXX	9	-	-
257	1800	2/23	15°58'N	153°36'W	77.9	230	06	77.2	73.3	1017	01	8,4	2	7	1	290	1	-	-
258	0000	2/24	16°43'N	154°12'W	77.5	240	12	78.0	72.5	1016	01	1,8	3	7	2	290	1	-	-
259	0600	2/24	17°25'N	154°52'W	77.1	260	11	77.0	72.0	1016	02	X	1	6	2	270	1	-	-
260	1200	2/24	18°02'N	155°25'W	76.0	310	11	76.0	70.5	1015	00	X	X	6	2	XXX	9	-	-
261	1800	2/24	18°46'N	155°58'W	76.2	340	10	75.2	71.3	1017	02	4,8	6	8	2	300	3	-	-
262	0000	2/25	19°24'N	156°29'W	77.0	020	14	76.0	71.0	1016	01	4,6	4	8	3	020	3	-	-
263	0600	2/25	20°03'N	157°06'W	76.3	050	19	74.0	69.4	1018	02	X	3	6	4	040	3	-	-

Table 4.--Observations at bathythermograph lowerings, Charles H. Gilbert cruise 38 (coded according to H. O. Pub. 606-c, second edition, 1956)

Ser. No.	Time, GCT	Date, 1958	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
1	0725	2/8	21°36'N	157°46'W	74.5	090	09	73.1	70.2	1016	00	X	X	8	2	XXX	1	34.97	-
2	1005	2/8	21°59'N	157°47'W	75.1	340	07	74.9	71.0	1016	00	X	X	8	2	XXX	1	35.08	-
3	1245	2/8	22°20'N	157°45'W	74.0	300	08	74.5	71.2	1015	01	4	5	8	2	050	1	34.94	-
4	1400	2/8	22°20'N	157°55'W	74.0	250	07	73.8	69.3	1015	02	4,8	5	8	2	XXX	1	35.01	-
5	1600	2/8	22°03'N	157°56'W	73.7	190	07	74.1	69.1	1015	02	4,8	3	8	2	XXX	1	34.95	-
6	1825	2/8	21°49'N	157°56'W	73.3	160	09	73.0	68.3	1015	03	4,6,8	6	8	2	320	1	35.01	-
7	2200	2/8	21°39'N	158°24'W	75.1	270	05	75.8	70.2	1016	02	4,6,8	6	8	1	XXX	1	35.08	-
8	0000	2/9	21°39'N	158°42'W	74.8	280	09	76.1	70.3	1015	02	4,6,8	4	8	1	170	1	35.06	-
9	0230	2/9	21°38'N	159°00'W	76.3	170	08	75.0	70.5	1014	01	8	2	8	1	180	1	35.09	-
10	0405	2/9	21°25'N	158°59'W	75.9	140	08	75.0	70.4	1015	01	8	1	8	1	180	1	35.05	-
11	0625	2/9	21°24'N	158°40'W	75.2	150	09	74.3	72.1	1015	02	X	X	8	1	XXX	1	35.03	-
12	0855	2/9	21°25'N	158°17'W	74.4	140	05	74.5	70.2	1015	02	X	X	8	1	XXX	1	34.98	-
13	1800	2/9	20°40'N	157°33'W	75.5	140	08	75.7	71.5	1016	02	8	1	8	1	130	1	34.95	0.27
14	0000	2/10	19°55'N	157°17'W	76.5	120	02	78.3	72.2	1014	02	8	1	8	1	130	1	34.11	0.22
15	0600	2/10	19°10'N	156°48'W	75.2	130	03	75.5	72.5	1017	02	X	X	8	2	130	1	35.04	0.27
16	1200	2/10	18°30'N	156°23'W	75.2	090	08	76.0	72.9	1016	02	8	1	8	2	140	1	34.95	0.23
17	1800	2/10	17°50'N	156°01'W	75.6	100	09	76.1	73.2	1017	02	8	1	8	2	110	1	34.82	0.29
18	0000	2/11	17°10'N	155°40'W	76.2	080	14	76.9	73.2	1014	03	8	6	8	2	100	1	34.79	0.43
19	0600	2/11	16°28'N	155°20'W	75.9	070	16	76.2	72.2	1016	00	X	X	8	3	100	3	34.70	0.35
20	1200	2/11	15°50'N	155°02'W	75.7	080	17	76.6	72.2	1015	00	X	X	8	4	100	3	34.85	0.26
21	1800	2/11	15°13'N	154°44'W	75.9	080	19	78.4	72.5	1015	01	8	2	8	4	120	3	34.63	0.27
22	0000	2/12	14°34'N	154°25'W	77.4	080	19	77.3	73.0	1012	03	8	5	8	5	090	3	34.79	0.26
23	0600	2/12	13°50'N	154°05'W	77.2	080	21	77.2	71.1	1014	02	X	X	8	5	090	3	34.36	0.39
24	1200	2/12	13°10'N	153°46'W	77.5	060	17	77.7	71.6	1012	00	X	X	8	5	090	3	34.42	0.28
25	1800	2/12	12°28'N	153°26'W	77.5	080	18	77.9	72.9	1014	03	6,4	7	8	5	090	3	34.41	0.32
26	0000	2/13	11°51'N	153°09'W	78.4	070	21	77.7	72.7	1010	01	8	2	8	5	100	3	34.49	0.36
27	0600	2/13	11°11'N	152°54'W	78.3	070	16	78.1	74.0	1012	02	X	1	8	5	100	4	34.46	0.44
28	1200	2/13	10°29'N	152°34'W	78.9	080	17	79.3	75.5	1010	02	X	X	8	5	100	4	34.66	0.35
29	1800	2/13	09°47'N	152°14'W	78.9	050	14	79.5	76.3	1013	14	7,5	8	7	4	100	4	34.52	0.36
30	0000	2/14	09°01'N	151°53'W	80.0	070	18	80.5	77.8	1010	21	7,5	8	7	4	100	4	34.72	0.23
31	0600	2/14	08°16'N	151°32'W	81.1	090	10	79.8	77.5	1011	00	X	X	7	4	100	4	34.68	0.53
32	1200	2/14	07°39'N	151°01'W	81.4	080	13	80.8	78.2	1009	00	X	X	7	4	100	4	34.60	0.35
33	1800	2/14	06°59'N	150°28'W	81.9	120	22	77.5	76.9	1011	62	7	8	7	4	100	4	34.56	0.67
34	0000	2/15	06°18'N	150°04'W	82.9	100	10	82.0	78.2	1008	01	4,8	6	8	3	090	3	34.64	0.69
35	0600	2/15	05°31'N	150°06'W	82.8	100	07	82.0	78.6	1008	00	X	X	8	3	090	3	34.94	0.42

Table 4.--Observations at bathythermograph lowerings, Charles H. Gilbert cruise 38 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Ser. No.	Time, GCT	Date, 1958	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
36	1200	2/15	05°02'N	150°03'W	82.4	090	08	81.0	79.0	1008	00	X	X	8	3	090	3	35.11	0.61
37	1700	2/15	04°42'N	150°10'W	82.3	090	12	82.8	78.5	1009	03	8,4	5	8	3	090	1	-	-
38	2205	2/15	04°44'N	150°05'W	83.2	090	11	85.5	80.1	1008	01	8	2	8	3	090	1	35.09	0.55
39	0225	2/16	04°40'N	149°57'W	83.3	090	07	84.0	78.5	1006	02	8	1	9	3	090	1	-	-
40	0900	2/16	04°17'N	149°56'W	82.5	100	11	81.9	78.2	1008	02	X	X	9	3	090	1	35.22	0.54
41	1655	2/16	03°55'N	150°01'W	82.6	110	10	82.2	78.2	1007	02	8	3	9	2	090	1	-	-
42	2205	2/16	03°52'N	150°00'W	83.1	110	10	83.1	79.4	1007	03	8	6	9	2	120	1	35.12	0.60
43	0050	2/17	03°50'N	149°52'W	82.8	110	10	80.8	77.5	1005	21	8	7	7	3	120	1	-	-
44	0900	2/17	03°18'N	150°00'W	82.6	130	14	81.0	78.5	1008	02	X	X	9	3	120	1	35.07	0.46
45	1650	2/17	02°57'N	150°12'W	82.3	160	16	81.8	77.3	1008	02	8,6	3	9	3	160	1	-	-
46	2205	2/17	02°57'N	150°17'W	82.7	130	11	83.3	78.3	1008	02	8	1	9	3	120	1	35.10	0.56
47	0040	2/18	02°53'N	150°14'W	83.2	120	12	82.0	77.5	1006	02	8	1	9	3	120	1	-	-
48	0900	2/18	02°19'N	150°07'W	82.6	110	11	82.4	78.0	1009	00	X	X	9	3	120	1	35.03	0.31
49	1647	2/18	01°55'N	150°14'W	82.5	110	10	82.9	78.8	1010	02	8	2	8	2	110	1	-	-
50	2206	2/18	01°54'N	150°20'W	83.0	110	11	84.0	78.8	1009	02	8	2	8	2	110	1	35.09	0.44
51	0050	2/19	01°51'N	150°18'W	83.6	130	06	83.5	78.9	1009	02	8	2	8	2	110	1	-	-
52	0900	2/19	01°19'N	150°14'W	82.8	110	18	78.8	77.2	1010	63	X	X	6	3	110	1	35.11	0.54
53	1637	2/19	00°54'N	150°19'W	82.4	110	19	82.3	78.3	1009	01	1,8	6	8	4	110	4	-	-
54	2203	2/19	00°53'N	150°19'W	82.6	110	13	84.0	78.9	1010	60	8,7	6	7	4	110	4	35.17	0.55
55	0045	2/20	00°52'N	150°17'W	83.0	110	12	81.9	71.3	1008	01	8,7	5	7	3	110	4	-	-
56	0900	2/20	00°27'N	150°06'W	82.2	100	10	82.4	78.8	1010	52	X	X	7	3	110	3	35.23	0.51
57	1639	2/20	00°06'N	150°06'W	82.1	120	12	82.1	79.3	1010	20	8,7	6	7	2	120	4	-	-
58	2200	2/20	00°11'N	150°02'W	82.3	120	13	83.7	79.1	1010	01	8	3	8	2	120	1	35.34	0.69
59	0027	2/21	00°07'N	150°00'W	82.7	120	13	83.2	78.8	1008	02	8	2	8	2	120	1	-	-
60	0900	2/21	00°21'S	150°04'W	82.2	100	14	81.7	78.8	1012	02	X	X	8	3	110	1	35.54	0.58
61	1635	2/21	00°48'S	150°10'W	82.2	110	13	81.1	78.2	1012	25	9	6	8	3	100	1	-	-
62	2200	2/21	00°45'S	150°12'W	82.7	090	16	84.2	79.1	1012	01	8	2	8	3	090	1	35.47	0.37
63	0015	2/22	00°44'S	150°08'W	82.5	090	15	81.0	79.0	1010	02	8	3	8	3	090	1	-	-
64	0600	2/22	01°08'S	149°46'W	82.2	060	15	81.8	78.8	1011	00	X	X	8	3	090	1	35.42	0.45
65	0900	2/22	01°23'S	149°33'W	82.2	060	15	81.7	78.1	1012	00	X	X	8	3	090	1	-	-
66	1200	2/22	01°38'S	149°19'W	82.1	050	16	81.2	78.0	1010	02	X	X	8	3	090	1	35.48	0.36
67	1500	2/22	01°52'S	149°04'W	82.0	050	16	81.4	78.0	1012	02	X	X	8	3	090	1	-	-
68	1800	2/22	02°10'S	148°50'W	82.2	070	16	82.5	78.0	1014	01	8	2	8	3	090	1	35.60	0.35
69	2100	2/22	02°25'S	148°37'W	82.4	060	16	81.9	77.9	1013	02	8	1	8	3	090	1	-	-
70	0000	2/23	02°39'S	148°20'W	82.8	060	14	81.9	77.6	1010	02	6,8	2	8	3	090	1	35.44	0.44

Table 4.--Observations at bathythermograph lowerings, Charles H. Gilbert cruise 38 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Ser. No.	Time, GCT	Date, 1958	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
71	0300	2/23	02°52'S	148°00'W	82.8	060	16	81.9	77.8	1010	03	4,8	3	8	3	090	1	-	-
72	0600	2/23	03°05'S	147°40'W	82.6	060	10	81.8	77.9	1012	00	X	X	8	2	090	1	35.56	0.35
73	0900	2/23	03°15'S	147°23'W	82.6	050	10	81.2	78.3	1013	00	X	X	8	2	090	1	-	-
74	1200	2/23	03°28'S	147°02'W	82.5	050	13	79.2	75.9	1011	00	X	X	8	2	090	1	35.51	0.41
75	1500	2/23	03°39'S	146°42'W	82.5	050	09	81.7	77.2	1012	00	X	X	8	2	090	1	-	-
76	1800	2/23	03°52'S	146°22'W	82.5	050	12	82.0	78.2	1014	03	6,8	6	8	2	090	1	35.65	0.36
77	2100	2/23	04°09'S	146°02'W	82.8	040	08	82.1	78.3	1013	02	6,8	6	8	2	080	1	-	-
78	0000	2/24	04°26'S	145°42'W	83.5	040	06	83.0	78.5	1010	15	6,8,9	6	8	2	080	1	35.46	0.80
79	0300	2/24	04°42'S	145°22'W	83.6	040	08	82.4	78.2	1010	01	8	3	8	2	080	1	-	-
80	0600	2/24	04°59'S	145°02'W	83.6	040	09	82.4	78.0	1012	00	X	X	8	2	080	1	35.63	0.34
81	0900	2/24	05°16'S	144°41'W	83.4	030	10	82.0	78.3	1012	01	8	1	8	2	080	1	-	-
82	1200	2/24	05°35'S	144°20'W	83.2	030	13	81.5	78.3	1010	00	X	X	8	2	080	1	35.59	0.31
83	1500	2/24	05°52'S	143°58'W	83.2	030	10	82.0	78.4	1010	01	8	2	8	2	080	1	-	-
84	1800	2/24	06°07'S	143°37'W	83.3	040	11	82.7	78.5	1012	02	8	2	8	2	080	1	35.66	0.29
85	2100	2/24	06°22'S	143°16'W	84.0	030	12	82.8	78.8	1011	03	8	3	8	2	060	1	-	-
86	0000	2/25	06°40'S	142°53'W	84.4	040	12	82.4	78.4	1009	03	8	4	8	2	060	1	35.81	0.51
87	0300	2/25	06°57'S	142°31'W	84.1	040	13	82.5	77.5	1010	01	8	2	8	2	060	1	-	-
88	0600	2/25	07°12'S	142°10'W	84.0	040	11	82.6	77.9	1012	00	X	X	8	2	060	1	35.80	-
89	0900	2/25	07°28'S	141°50'W	84.1	030	11	81.5	77.8	1012	02	X	X	8	2	060	1	-	-
90	1200	2/25	07°43'S	141°29'W	84.1	030	07	82.2	77.1	1011	00	X	X	8	2	060	1	35.91	0.38
91	1500	2/25	07°58'S	141°09'W	84.1	030	06	82.1	76.3	1011	00	8	2	8	1	060	1	-	-
92	1800	2/25	08°14'S	140°48'W	83.9	040	06	83.9	76.4	1012	01	6,8	2	8	1	060	1	35.88	0.35
93	2100	2/25	08°34'S	140°32'W	85.0	050	06	86.1	77.3	1012	02	6	1	8	1	060	1	-	-
94	0000	2/26	08°52'S	140°18'W	84.7	050	06	83.5	77.3	1010	02	4,8	2	8	1	060	1	35.88	0.36
95	1925	2/27	08°47'S	140°20'W	85.5	360	07	85.9	78.8	1010	01	8	2	8	2	230	1	-	-
96	2200	2/27	08°34'S	140°36'W	86.0	030	07	86.3	78.5	1009	02	8	3	8	2	320	1	35.91	0.35
97	2155	2/28	07°42'S	140°11'W	84.7	320	06	85.6	79.5	1008	01	8	2	8	2	030	1	35.90	0.35
98	0107	3/1	07°57'S	139°47'W	85.0	340	09	84.7	78.3	1007	02	4,8	7	8	2	030	1	-	-
99	2200	3/1	08°41'S	139°18'W	85.1	350	07	86.1	78.3	1008	03	8	6	8	2	030	1	35.93	0.35
100	2037	3/2	09°22'S	139°01'W	84.1	050	10	83.6	77.1	1010	03	4,8	5	8	3	030	1	-	-
101	2037	3/3	10°01'S	138°52'W	84.5	060	16	83.3	78.1	1011	03	8	4	8	2	060	1	-	-
102	2150	3/3	10°05'S	138°51'W	84.5	060	16	84.5	78.7	1010	02	8	4	8	2	060	1	35.76	0.43
103	2200	3/5	09°36'S	139°48'W	84.5	040	07	86.2	78.2	1010	01	8	1	8	2	030	1	35.83	0.43
104	1700	3/6	09°35'S	139°51'W	84.0	080	17	83.8	77.0	1011	03	8	2	8	3	080	1	-	-
105	1900	3/6	09°35'S	139°50'W	83.8	090	17	84.6	77.2	1012	01	8	2	8	3	090	1	-	-

Table 4. --Observations at bathythermograph lowerings, Charles H. Gilbert cruise 38 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Ser. No.	Time, GCT	Date, 1958	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
106	2100	3/6	09°36'S	139°52'W	84.1	060	14	85.5	78.3	1010	03	8	3	8	3	080	1	-	-
107	2300	3/6	09°34'S	139°51'W	84.3	070	14	84.8	77.3	1008	02	8	2	8	3	080	1	35.97	-
108	0100	3/7	09°34'S	139°51'W	84.4	070	14	85.5	76.8	1008	02	8	1	8	3	080	1	-	-
109	0300	3/7	09°35'S	139°50'W	84.2	070	14	84.4	77.9	1008	02	8	2	8	3	080	1	-	-
110	0500	3/7	09°34'S	139°51'W	84.0	070	19	83.0	77.7	1008	02	8	3	8	3	080	1	-	-
111	0700	3/7	09°34'S	139°51'W	84.0	070	14	83.7	76.2	1009	02	8	1	8	3	080	1	-	-
112	0900	3/7	09°34'S	139°51'W	84.0	070	14	83.4	76.2	1009	02	8	1	8	3	080	1	-	-
113	1100	3/7	09°34'S	139°51'W	83.9	110	08	83.6	76.5	1008	02	8	1	8	3	080	1	-	-
114	1300	3/7	09°34'S	139°51'W	84.2	090	07	83.1	75.7	1008	02	8	1	8	2	080	1	-	-
115	1500	3/7	09°34'S	139°49'W	83.5	070	10	80.0	76.3	1008	25	4,9	6	7	2	080	1	-	-
116	1800	3/10	10°10'S	141°36'W	84.3	100	19	85.2	78.6	1011	03	8	3	8	3	100	1	-	-
117	0000	3/11	10°42'S	142°16'W	84.8	100	14	84.8	77.7	1008	02	8	3	8	3	100	1	-	-
118	0600	3/11	11°14'S	142°48'W	84.0	090	14	84.0	77.5	1010	00	X	X	8	3	100	1	-	-
119	1200	3/11	11°46'S	143°24'W	84.5	060	12	82.0	77.7	1010	00	X	X	8	2	100	1	-	-
120	1800	3/11	12°19'S	144°00'W	84.4	130	10	82.0	78.8	1012	03	6,8	7	8	2	130	1	-	-
121	0000	3/12	12°52'S	144°31'W	84.6	100	07	83.7	76.9	1009	02	6,8	5	8	2	130	1	-	-
122	0600	3/12	13°28'S	145°11'W	84.8	100	10	83.3	78.6	1010	00	X	X	8	2	130	1	-	-
123	1200	3/12	14°07'S	145°47'W	84.5	100	14	82.8	77.6	1010	03	8	4	8	2	100	1	-	-
124	1800	3/12	14°36'S	146°22'W	84.5	100	10	84.3	78.8	1012	01	8,6	2	8	2	110	1	-	-
125	2028	3/12	14°44'S	146°39'W	84.8	100	09	84.2	78.4	1011	02	8	3	8	2	110	1	-	-
126	0000	3/12	14°52'S	147°12'W	85.0	130	07	84.7	77.9	1008	03	5,8	6	8	2	110	1	-	-
127	1900	3/13	14°48'S	147°54'W	84.6	080	11	85.6	79.5	1010	02	8	4	8	2	110	1	-	-
128	2200	3/13	14°57'S	147°56'W	85.0	080	14	87.4	80.0	1009	80	8,9	5	8	2	110	1	-	-
129	0000	3/15	15°38'S	148°18'W	85.0	080	14	83.9	79.6	1010	25	8,9,4	5	8	2	080	1	-	-
130	0600	3/15	16°20'S	148°44'W	84.0	100	13	84.1	79.2	1012	00	X	X	8	2	080	1	-	-
131	1200	3/15	17°04'S	149°12'W	84.0	080	17	83.5	79.3	1012	00	X	X	8	3	080	1	-	-
132	0000	3/20	17°12'S	149°14'W	84.1	120	12	84.9	77.8	1012	03	8	2	8	3	090	1	-	-
133	0600	3/20	16°41'S	148°42'W	83.9	120	15	84.5	77.9	1013	00	X	X	8	2	090	1	-	-
134	1200	3/20	16°13'S	148°08'W	84.1	100	14	83.8	77.0	1012	00	X	X	8	2	090	1	-	-
135	1800	3/20	15°44'S	147°35'W	84.0	110	12	86.5	78.3	1014	03	8	2	8	3	090	1	-	-
136	0000	3/21	15°16'S	147°01'W	84.7	090	18	84.4	77.3	1010	02	8	2	8	3	090	1	-	-
137	0600	3/21	14°48'S	146°23'W	84.5	090	14	84.6	78.6	1012	00	X	X	8	3	090	1	-	-
138	1200	3/21	14°13'S	145°51'W	84.4	100	15	83.6	77.8	1011	00	X	X	8	3	090	1	-	-
139	1800	3/21	13°42'S	145°20'W	84.3	100	14	83.9	78.0	1014	03	6,8	4	8	3	090	1	-	-
140	0000	3/22	13°09'S	144°48'W	85.0	100	12	84.0	78.5	1011	02	6,8	4	8	3	090	1	-	-

Table 4.--Observations at bathythermograph lowerings, Charles H. Gilbert cruise 38 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Ser. No.	Time, GCT	Date, 1958	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
141	0600	3/22	12°34'S	144°16'W	84.4	120	14	85.3	79.1	1013	00	X	X	8	3	090	1	-	-
142	1200	3/22	12°00'S	143°47'W	84.4	100	20	83.5	77.2	1011	00	X	X	8	3	090	1	-	-
143	1800	3/22	11°28'S	143°16'W	84.1	090	15	84.9	78.9	1012	03	8,5	3	8	3	090	4	-	-
144	0000	3/23	10°59'S	142°40'W	85.0	090	16	85.3	78.8	1010	02	8	3	8	3	090	4	-	-
145	0600	3/23	10°32'S	142°09'W	84.4	120	14	85.7	77.8	1012	00	X	X	8	3	090	4	-	-
146	1200	3/23	10°05'S	141°36'W	84.2	110	20	84.8	77.5	1010	00	X	X	8	3	090	4	-	-
147	1800	3/23	09°40'S	141°04'W	84.4	110	17	85.5	78.2	1011	03	8	2	8	3	090	4	-	-
148	0000	3/24	09°18'S	140°36'W	84.9	100	18	84.8	78.2	1008	02	8	2	8	4	090	4	-	-
149	1600	3/26	09°08'S	139°36'W	83.8	110	09	83.0	77.9	1011	03	8	2	8	3	110	1	35.87	0.35
150	1900	3/26	09°11'S	139°20'W	84.0	120	14	85.7	79.8	1012	02	8	3	8	3	100	1	35.90	0.35
151	2200	3/26	09°10'S	138°58'W	84.0	100	09	84.5	77.4	1010	02	6	5	8	3	100	1	35.82	0.34
152	0100	3/27	09°12'S	138°42'W	83.9	140	19	84.1	78.0	1008	15	4	7	7	4	100	4	35.81	0.32
153	0400	3/27	09°12'S	138°24'W	83.7	180	08	83.0	77.1	1010	00	X	X	7	3	100	4	35.76	0.41
154	0700	3/27	09°11'S	138°06'W	83.8	080	09	84.2	76.0	1012	00	X	X	7	3	100	4	35.78	0.50
155	1000	3/27	09°10'S	137°50'W	83.8	080	10	83.8	77.5	1010	00	X	X	7	3	100	4	35.67	0.43
156	1300	3/27	09°09'S	137°34'W	83.8	090	10	82.7	75.6	1010	00	X	X	8	3	100	4	35.78	0.44
157	1600	3/27	09°07'S	137°14'W	83.8	080	09	84.3	77.5	1011	02	8	6	8	3	090	4	35.75	0.69
158	1900	3/27	09°10'S	136°56'W	83.8	110	08	86.3	78.1	1012	01	8	3	8	3	090	4	35.76	0.44
159	2200	3/27	09°12'S	136°36'W	84.1	090	08	85.8	78.9	1010	03	4,8	5	8	3	090	4	35.79	0.44
160	0100	3/28	09°12'S	136°15'W	84.1	080	09	84.9	77.9	1009	02	6,8	4	8	3	090	4	35.85	0.45
161	0400	3/28	09°12'S	136°00'W	83.9	080	10	83.5	77.9	1010	00	X	X	7	3	090	4	-	0.44
162	0600	3/28	09°11'S	136°15'W	83.8	080	11	80.8	76.8	1012	50	X	X	7	3	090	4	35.84	0.42
163	0900	3/28	09°08'S	136°36'W	83.5	080	09	82.4	77.3	1011	80	X	X	7	3	090	4	35.75	0.44
164	1200	3/28	09°07'S	136°56'W	83.7	070	12	82.8	77.7	1010	00	X	X	7	3	090	4	35.77	0.46
165	1500	3/28	09°05'S	137°16'W	83.7	080	12	84.0	78.1	1011	03	8	2	7	3	090	4	35.79	0.74
166	1833	3/28	09°00'S	137°29'W	84.0	050	14	85.7	80.5	1012	02	8	2	8	3	090	4	35.82	0.50
167	2100	3/28	09°00'S	137°48'W	84.2	080	13	86.5	79.6	1011	02	8	3	8	3	090	4	35.74	0.39
168	0000	3/29	09°04'S	138°10'W	84.4	100	14	85.1	79.9	1009	02	8	2	8	3	090	4	35.73	0.50
169	0300	3/29	09°09'S	138°33'W	84.0	090	15	84.6	77.9	1009	02	8	2	8	3	090	4	35.73	0.45
170	0600	3/29	09°09'S	138°53'W	84.0	100	14	84.0	77.5	1011	00	X	X	7	3	090	4	35.75	0.41
171	0900	3/29	09°08'S	139°10'W	84.1	090	16	84.5	78.2	1010	02	8	1	7	3	090	4	35.86	0.36
172	1200	3/29	09°08'S	139°27'W	84.2	090	14	85.0	78.9	1010	00	X	X	7	3	090	4	35.88	0.42
173	1500	3/29	09°06'S	139°45'W	84.1	080	11	83.9	77.5	1010	01	8	1	8	3	090	4	35.83	0.34
174	1836	3/29	08°42'S	139°42'W	84.2	090	12	85.7	80.2	1010	02	8	1	8	3	080	1	35.90	0.39
175	2100	3/29	08°28'S	139°41'W	84.2	100	13	85.5	79.4	1009	02	8,1	2	8	3	080	1	35.81	0.44

Table 4.--Observations at bathythermograph lowerings, Charles H. Gilbert cruise 38 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Ser. No.	Time, GCT	Date, 1958	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
176	0117	3/30	08°04'S	139°46'W	84.6	090	12	85.1	80.1	1008	03	8	4	8	3	080	1	35.78	0.35
177	0300	3/30	07°51'S	139°47'W	84.5	090	12	84.1	79.0	1008	02	8	3	8	2	080	1	35.76	0.44
178	0600	3/30	07°32'S	139°46'W	85.2	100	09	84.1	79.2	1010	00	X	X	8	2	080	1	35.72	0.61
179	0900	3/30	07°14'S	139°45'W	84.0	090	09	85.0	79.9	1010	00	X	X	7	2	080	1	35.79	0.59
180	1200	3/30	06°57'S	139°44'W	83.9	100	10	83.5	78.9	1009	00	X	X	7	2	080	1	35.60	0.52
181	1500	3/30	06°40'S	139°42'W	83.6	100	12	82.8	78.4	1010	03	8	3	7	2	080	1	35.57	0.52
182	1800	3/30	06°23'S	139°40'W	83.3	090	14	83.3	79.2	1011	02	8	4	8	3	080	1	35.56	0.54
183	2100	3/30	05°59'S	139°40'W	83.5	100	10	84.2	79.3	1010	02	8	4	8	3	080	1	35.10	0.59
184	0000	3/31	05°41'S	139°38'W	83.5	080	13	84.4	79.0	1008	01	8	5	7	3	080	1	35.46	0.52
185	0300	3/31	05°27'S	139°39'W	83.5	090	12	83.8	78.7	1010	15	9,4	6	7	3	080	1	35.46	0.51
186	0600	3/31	05°44'S	139°40'W	83.2	110	12	83.0	78.6	1011	00	X	X	7	3	080	1	35.41	0.54
187	0900	3/31	06°02'S	139°39'W	83.2	110	12	82.3	78.7	1012	00	X	X	8	3	080	1	35.45	0.53
188	1200	3/31	06°20'S	139°39'W	83.2	090	11	82.8	78.6	1010	00	X	X	7	3	080	1	35.54	0.53
189	1500	3/31	06°36'S	139°39'W	83.4	080	10	82.4	78.1	1011	02	8,1	4	8	3	080	1	35.56	0.52
190	1800	3/31	06°57'S	139°39'W	83.6	080	13	84.1	79.0	1013	03	4,8	5	8	3	080	1	35.69	0.51
191	2100	3/31	07°18'S	139°39'W	84.1	080	09	83.9	79.0	1012	02	4,8	3	8	3	080	1	35.71	0.60
192	0000	4/1	07°39'S	139°38'W	84.4	040	13	83.9	78.9	1010	03	8,4	5	8	3	080	1	35.75	0.61
193	0300	4/1	07°56'S	139°38'W	84.5	070	12	83.4	78.3	1010	02	8	6	8	3	080	1	35.72	0.35
194	0600	4/1	08°10'S	139°44'W	84.3	070	09	83.8	79.1	1012	00	X	X	7	2	080	1	35.68	0.37
195	0900	4/1	08°24'S	139°51'W	84.2	070	08	84.0	77.9	1012	00	X	X	7	2	080	1	35.72	0.34
196	1200	4/1	08°38'S	139°57'W	84.3	060	09	83.5	78.1	1010	02	8	1	8	2	080	1	35.70	0.35
197	1500	4/3	09°08'S	139°40'W	84.0	070	13	82.8	77.3	1010	00	8	2	8	3	080	4	35.83	0.41
198	1800	4/3	09°08'S	140°02'W	84.2	080	14	83.1	77.8	1012	02	8	1	8	3	080	1	35.83	0.29
199	2100	4/3	09°09'S	140°26'W	84.7	100	09	85.2	77.4	1011	01	8	1	8	3	080	1	35.87	0.52
200	0031	4/4	09°11'S	140°42'W	85.1	070	11	87.2	78.0	1008	02	8	1	8	3	080	1	35.87	0.32
201	0300	4/4	09°10'S	140°54'W	85.4	350	05	86.1	78.2	1009	02	8	2	8	3	080	1	35.88	0.33
202	0600	4/4	09°08'S	141°14'W	84.6	140	06	84.1	78.0	1011	02	8	2	7	2	080	1	35.88	0.32
203	0900	4/4	09°08'S	141°34'W	84.6	040	08	83.2	77.6	1012	03	8	6	8	2	080	1	35.85	0.32
204	1200	4/4	09°07'S	141°52'W	84.8	340	06	83.5	75.4	1010	01	8	1	7	2	080	1	35.86	0.33
205	1500	4/4	09°07'S	142°09'W	84.6	050	06	82.5	75.5	1010	02	8	1	8	2	080	1	35.86	0.36
206	1800	4/4	09°07'S	142°32'W	84.7	040	06	83.3	75.7	1012	02	8	1	8	2	080	1	35.85	0.32
207	2100	4/4	09°08'S	142°54'W	85.9	020	06	83.2	77.0	1012	03	4,8	3	8	2	080	1	35.91	0.40
208	0000	4/5	09°08'S	143°12'W	87.7	350	03	85.4	77.0	1010	03	8,1	5	8	1	080	1	35.93	0.32
209	0300	4/5	09°07'S	143°16'W	87.5	160	03	85.2	76.4	1008	02	4,8	5	8	1	080	1	35.85	0.38
210	0600	4/5	09°05'S	142°58'W	86.0	090	04	84.1	76.9	1010	01	X	2	8	1	080	1	35.87	0.33

Table 4.--Observations at bathythermograph lowerings, Charles H. Gilbert cruise 38 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Ser. No.	Time, GCT	Date, 1958	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
211	0900	4/5	09°03'S	142°44'W	85.0	090	05	83.8	75.0	1010	02	4	2	7	2	080	1	35.84	0.44
212	1200	4/5	09°04'S	142°28'W	84.9	080	07	82.3	75.2	1009	03	8	4	7	2	080	1	35.84	0.34
213	1500	4/5	09°05'S	142°10'W	84.4	060	04	82.9	75.0	1010	02	8	3	8	2	080	1	35.88	0.35
214	1800	4/5	09°05'S	141°50'W	84.7	070	08	84.4	76.3	1011	02	8	3	8	2	080	1	35.85	0.34
215	2100	4/5	09°08'S	141°29'W	85.3	040	06	84.3	76.9	1010	01	8	2	8	2	080	1	35.88	0.27
216	0000	4/6	09°09'S	141°08'W	86.0	060	06	85.5	77.3	1007	02	8	2	8	2	060	1	35.87	0.80
217	0300	4/6	09°08'S	140°46'W	86.1	040	03	83.7	75.5	1007	02	8	2	8	1	060	1	35.89	0.28
218	0600	4/6	09°09'S	140°28'W	85.6	150	05	83.5	75.1	1009	02	8	2	7	0	060	1	35.90	0.35
219	0900	4/6	09°10'S	140°13'W	84.8	050	06	82.0	76.1	1010	02	8	2	8	1	060	1	35.84	0.35
220	1200	4/6	09°12'S	139°57'W	84.5	020	11	82.4	75.9	1008	02	8	2	7	2	060	1	35.86	0.38
221	1500	4/6	09°16'S	139°40'W	84.4	030	12	82.5	75.9	1008	02	8	1	7	2	060	1	35.93	0.35
222	1800	4/6	09°36'S	139°40'W	84.5	030	15	86.2	77.9	1010	02	8	1	8	3	060	1	35.91	0.36
223	2100	4/6	09°57'S	139°40'W	84.7	030	13	85.2	77.1	1008	02	8	2	8	3	060	1	35.90	0.26
224	0000	4/7	10°16'S	139°42'W	84.8	360	14	83.4	77.2	1007	02	8	2	8	3	060	1	35.93	0.30
225	0300	4/7	10°34'S	139°43'W	85.0	330	10	86.5	77.6	1008	03	8,5	5	8	2	060	1	35.95	0.30
226	0600	4/7	10°52'S	139°45'W	85.0	350	07	84.3	77.3	1010	00	X	X	8	2	050	1	36.08	0.65
227	0900	4/7	11°12'S	139°47'W	84.4	320	06	84.4	76.6	1010	03	4	5	7	1	050	1	36.00	0.34
228	1200	4/7	11°28'S	139°48'W	84.2	020	05	80.5	76.2	1008	00	X	3	7	2	050	1	36.02	0.35
229	1500	4/7	11°44'S	139°49'W	84.1	040	05	83.2	76.2	1010	03	4,8	5	7	2	050	1	36.01	0.36
230	1800	4/7	12°04'S	139°48'W	84.0	080	10	81.2	77.8	1011	60	7	8	7	2	140	4	36.01	0.35
231	2100	4/7	12°24'S	139°47'W	84.2	070	07	82.5	77.9	1010	20	7	7	7	2	140	1	35.87	0.30
232	0000	4/8	12°44'S	139°46'W	85.2	090	05	82.7	78.2	1008	01	8,4,2	3	8	2	120	1	35.92	0.30
233	0300	4/8	12°50'S	139°46'W	84.9	070	05	84.2	77.5	1008	02	8	3	8	2	120	1	35.94	0.30
234	0600	4/8	12°32'S	139°43'W	84.2	110	05	83.8	77.6	1010	00	X	X	7	2	150	1	35.95	0.30
235	0900	4/8	12°17'S	139°43'W	84.3	090	06	82.8	77.8	1011	00	X	X	7	2	150	1	35.99	0.36
236	1200	4/8	12°00'S	139°41'W	84.2	090	11	83.9	77.6	1010	00	X	X	7	2	150	1	36.01	0.38
237	1500	4/8	11°43'S	139°40'W	84.1	030	04	82.2	75.6	1010	02	8	2	8	1	150	1	36.02	0.36
238	1800	4/8	11°23'S	139°41'W	83.9	060	08	83.8	76.8	1012	01	2,8	2	8	2	150	1	36.00	0.36
239	2100	4/8	11°03'S	139°42'W	84.6	060	08	85.6	78.1	1010	02	8	2	8	2	150	1	36.02	0.62
240	0000	4/9	10°43'S	139°42'W	85.3	040	08	86.5	77.5	1008	01	8	2	8	2	150	1	35.96	0.34
241	0300	4/9	10°22'S	139°43'W	85.4	040	06	84.3	76.7	1009	02	8	1	8	2	150	1	36.01	0.35
242	0600	4/9	10°02'S	139°44'W	85.1	070	04	84.1	75.6	1010	00	X	X	7	2	150	1	35.97	0.29
243	0900	4/9	09°42'S	139°48'W	84.8	060	12	84.1	77.7	1011	03	8	5	7	2	150	1	35.91	0.32
244	1200	4/9	09°24'S	139°51'W	84.4	070	09	82.9	77.3	1010	01	8	2	8	2	150	1	35.94	0.36
245	1500	4/9	09°08'S	139°55'W	84.4	070	09	83.9	76.8	1010	02	8	2	8	2	150	1	35.88	0.18

Table 4.--Observations at bathythermograph lowerings, Charles H. Gilbert cruise 38 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Ser. No.	Time, GCT	Date, 1958	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
246	2104	4/11	08°37'S	140°39'W	85.1	080	10	87.5	79.5	1010	02	8	2	8	2	010	1	-	-
247	2200	4/11	08°32'S	140°40'W	85.2	060	09	87.6	79.3	1010	02	8	3	8	2	010	1	35.92	0.31
248	0132	4/12	08°12'S	140°40'W	85.1	080	11	84.2	78.0	1009	14	9	3	8	2	010	1	35.94	0.62
249	2200	4/12	07°50'S	140°06'W	85.2	100	11	85.4	77.8	1010	03	8	4	8	2	060	1	35.94	0.49
250	0014	4/13	07°55'S	140°00'W	85.3	090	11	85.1	77.6	1009	02	8	3	8	2	060	1	-	-
251	2200	4/13	08°44'S	139°32'W	84.6	100	14	83.5	76.2	1011	01	8	2	8	3	100	4	35.87	0.49
252	2200	4/14	09°34'S	138°54'W	84.5	070	21	XXX	XXX	1012	60	7	8	6	3	090	4	35.99	0.41
253	2200	4/15	10°12'S	138°50'W	84.4	100	14	84.1	77.3	1010	03	8	7	8	3	080	4	36.04	0.50
254	2200	4/17	09°33'S	139°50'W	85.0	080	09	87.5	79.9	1012	01	8	2	8	2	060	1	35.95	0.58
255	0000	4/18	09°34'S	139°49'W	85.2	080	09	86.4	79.0	1010	02	8	3	8	2	060	1	-	-
256	0200	4/18	09°34'S	139°49'W	85.0	070	11	84.2	78.3	1010	25	7,4	6	7	2	070	1	-	-
257	0400	4/18	09°34'S	139°48'W	84.7	050	08	83.8	77.9	1012	00	X	X	7	2	060	1	-	-
258	0600	4/18	09°33'S	139°50'W	84.5	050	12	83.8	77.1	1013	00	X	X	7	2	060	1	-	-
259	0800	4/18	09°32'S	139°53'W	84.6	120	08	83.3	78.5	1013	80	X	X	7	2	060	1	-	-
260	1000	4/18	09°32'S	139°52'W	84.6	070	10	83.2	78.0	1012	00	X	X	7	2	060	1	-	-
261	1200	4/18	09°33'S	139°52'W	84.6	070	11	82.8	77.5	1011	00	X	X	7	2	060	1	-	-
262	1400	4/18	09°35'S	139°52'W	84.4	070	21	80.6	77.0	1012	00	X	X	7	2	060	1	-	-
263	1600	4/18	09°34'S	139°52'W	84.4	070	08	81.8	76.3	1012	01	6	2	8	2	060	1	-	-
264	1800	4/18	09°33'S	139°51'W	84.4	080	08	83.2	78.2	1013	02	8	1	8	2	080	1	-	-
265	2000	4/18	09°34'S	139°51'W	84.7	080	13	85.1	78.6	1013	03	8	3	8	2	080	1	-	-
266	2147	4/18	09°32'S	139°52'W	85.0	090	05	86.1	78.5	1012	01	8	2	8	2	080	1	-	-
267	0000	4/22	08°44'S	140°22'W	85.4	260	03	88.5	80.9	1011	03	8	3	8	2	060	1	35.94	0.50
268	0305	4/22	08°23'S	140°38'W	84.8	100	16	84.1	79.8	1011	02	8	2	8	2	070	1	-	-
269	0600	4/22	08°02'S	140°50'W	84.9	080	14	84.4	79.8	1013	00	X	X	7	2	070	1	35.91	0.50
270	0900	4/22	07°46'S	140°58'W	84.8	080	15	83.9	79.7	1012	00	X	X	7	2	070	1	-	-
271	1200	4/22	07°26'S	141°10'W	84.7	090	13	84.4	79.3	1011	00	X	X	7	2	070	1	35.88	0.47
272	1500	4/22	07°06'S	141°22'W	84.7	100	17	83.3	78.0	1011	00	X	X	7	3	070	1	-	-
273	1800	4/22	06°46'S	141°34'W	84.7	090	15	84.5	79.1	1013	02	8	2	8	3	070	1	35.85	0.63
274	2100	4/22	06°26'S	141°46'W	84.8	100	11	86.6	80.0	1012	03	8	3	8	3	090	1	-	-
275	0000	4/23	06°05'S	141°58'W	84.6	110	10	84.3	81.4	1009	02	8	2	8	3	100	1	35.57	0.65
276	0300	4/23	05°42'S	142°12'W	84.4	110	11	83.5	80.0	1009	02	8	3	8	3	100	1	-	-
277	0600	4/23	05°21'S	142°26'W	84.2	080	10	82.8	79.5	1010	00	X	X	8	3	100	1	35.43	0.56
278	0900	4/23	05°04'S	142°34'W	83.5	070	11	82.3	79.2	1010	60	X	X	8	3	090	1	-	-
279	1200	4/23	04°41'S	142°46'W	83.3	060	08	80.0	78.1	1009	00	X	X	8	2	090	1	35.17	0.45
280	1500	4/23	04°19'S	142°58'W	83.4	050	13	83.2	78.8	1009	03	8	3	8	2	090	1	-	-

Table 4. --Observations at bathythermograph lowerings, Charles H. Gilbert cruise 38 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Ser. No.	Time, GCT	Date, 1958	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
281	1800	4/23	03°58'S	143°13'W	83.4	050	11	84.5	79.8	1012	03	4,8	5	8	2	060	1	35.13	0.50
282	2100	4/23	03°38'S	143°27'W	84.0	050	07	85.4	79.9	1011	02	8	6	8	2	080	1	-	-
283	0000	4/24	03°16'S	143°42'W	83.7	020	10	83.4	78.6	1009	14	9,4	7	8	2	080	1	35.08	0.60
284	0300	4/24	02°55'S	143°57'W	83.3	270	07	80.7	77.4	1009	14	9	7	7	2	080	1	-	-
285	0600	4/24	02°34'S	144°12'W	83.0	250	03	80.8	77.8	1010	00	X	X	7	2	080	1	35.14	0.54
286	0900	4/24	02°16'S	144°24'W	84.0	270	03	81.3	77.6	1010	00	X	X	7	2	080	1	-	-
287	1200	4/24	01°54'S	144°37'W	83.1	030	04	82.2	77.1	1008	00	X	X	7	2	080	1	35.19	0.59
288	1500	4/24	01°33'S	144°50'W	82.9	090	07	81.6	76.7	1008	00	8	2	8	2	080	1	-	-
289	1800	4/24	01°11'S	145°06'W	82.7	090	07	83.0	78.1	1010	02	8	2	8	2	080	1	35.23	0.61
290	2100	4/24	00°49'S	145°20'W	83.2	100	07	85.9	78.9	1010	01	8	2	8	2	080	1	-	-
291	0000	4/25	00°25'S	145°32'W	83.8	100	05	84.0	78.1	1007	02	8	1	8	2	080	1	35.36	0.69
292	0300	4/25	00°00'	145°44'W	83.2	110	09	84.4	78.3	1007	02	4	2	8	2	080	1	-	-
293	0600	4/25	00°22'N	145°57'W	82.5	100	08	82.2	78.1	1008	00	X	X	8	2	080	1	35.37	0.60
294	0900	4/25	00°42'N	146°08'W	82.5	130	11	83.3	78.5	1010	00	X	X	7	2	080	1	-	-
295	1200	4/25	01°04'N	146°21'W	82.3	130	14	81.9	78.2	1008	00	X	X	7	2	080	1	35.18	0.84
296	1500	4/25	01°26'N	146°34'W	82.6	130	12	82.8	78.8	1008	03	8	2	7	2	080	1	-	-
297	1800	4/25	01°48'N	146°49'W	82.7	120	13	84.4	80.0	1009	03	8,4	4	8	2	080	1	34.98	0.52
298	2100	4/25	02°08'N	147°04'W	83.0	120	08	84.5	80.1	1008	03	8	6	8	2	080	1	-	-
299	0000	4/26	02°28'N	147°17'W	83.8	120	09	84.0	80.3	1007	02	8,5	5	8	2	080	1	34.84	0.40
300	0300	4/26	02°52'N	147°28'W	83.8	XXX	XX	83.2	78.3	1007	02	8,5	6	8	2	080	1	-	-
301	0600	4/26	03°15'N	147°40'W	83.4	180	09	83.3	78.6	1009	00	X	X	7	2	080	1	34.72	0.34
302	0900	4/26	03°33'N	147°50'W	83.2	220	08	82.6	78.7	1009	00	X	X	8	2	080	1	-	-
303	1200	4/26	03°55'N	148°02'W	82.5	340	09	80.2	77.9	1008	60	X	X	7	2	080	1	34.19	0.33
304	1500	4/26	04°16'N	148°14'W	82.1	290	06	XXX	XXX	1009	62	X	X	6	2	080	1	-	-
305	1800	4/26	04°37'N	148°26'W	81.5	360	06	79.4	76.6	1010	50	5,4,7	7	7	2	030	1	34.64	0.44
306	2100	4/26	04°58'N	148°38'W	82.3	020	15	83.3	77.7	1011	03	6,8	8	8	2	030	1	-	-
307	0000	4/27	05°18'N	148°47'W	82.5	070	18	81.5	78.2	1008	14	6,4,8	8	7	3	040	1	34.61	0.49
308	0300	4/27	05°41'N	148°57'W	82.3	050	15	81.4	77.2	1008	03	5,6	7	7	3	040	4	-	-
309	0600	4/27	06°02'N	149°07'W	82.2	080	13	80.2	77.1	1010	00	X	X	7	4	030	4	34.61	0.42
310	0900	4/27	06°20'N	149°15'W	82.0	060	13	81.5	78.0	1010	80	9	7	7	3	040	4	-	-
311	1200	4/27	06°42'N	149°26'W	82.0	060	13	80.2	78.6	1008	00	X	X	7	3	040	4	34.72	0.44
312	1500	4/27	07°05'N	149°37'W	81.5	060	18	82.0	78.1	1009	00	X	X	7	3	040	4	-	-
313	1800	4/27	07°24'N	149°52'W	81.5	050	19	79.6	77.7	1011	60	7,8,5	8	6	4	040	4	34.69	0.35
314	2100	4/27	07°44'N	150°07'W	81.2	060	20	79.5	77.8	1011	50	7,5	8	6	4	040	4	-	-
315	0000	4/28	08°05'N	150°20'W	81.1	060	18	83.1	78.4	1009	21	7,5,8	7	6	4	040	4	34.82	0.50

Table 4.--Observations at bathythermograph lowerings, Charles H. Gilbert cruise 38 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Ser. No.	Time, GCT	Date, 1958	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
316	0300	4/28	08°29'N	150°32'W	81.1	050	19	80.9	77.5	1009	14	7,5	8	6	4	040	4	-	-
317	0600	4/28	08°51'N	150°45'W	81.0	060	17	80.0	77.0	1010	00	X	X	6	4	040	4	34.74	0.35
318	0900	4/28	09°12'N	150°58'W	81.0	060	20	81.1	76.3	1010	00	X	X	6	4	040	4	-	-
319	1200	4/28	09°32'N	151°10'W	80.9	080	20	79.5	76.3	1009	00	X	X	6	4	040	4	34.75	0.31
320	1500	4/28	09°52'N	151°22'W	80.7	070	18	79.7	76.1	1009	00	X	X	6	4	040	4	-	-
321	1800	4/28	10°14'N	151°38'W	80.4	060	16	79.0	76.2	1011	03	8,1	2	7	4	040	4	34.85	0.27
322	2100	4/28	10°35'N	151°53'W	80.2	070	18	81.3	76.7	1011	02	8	4	8	4	040	4	-	-
323	0000	4/29	10°58'N	152°06'W	80.5	070	16	81.2	77.0	1010	02	8	5	8	4	050	4	34.88	0.34
324	0600	4/29	11°44'N	152°31'W	80.0	060	16	79.8	75.6	1012	00	X	X	7	3	050	4	34.81	0.44
325	1200	4/29	12°24'N	152°54'W	79.3	070	19	78.0	74.6	1010	00	X	X	8	3	050	4	34.79	0.67
326	1800	4/29	13°08'N	153°20'W	79.0	080	16	78.9	74.0	1013	03	8,4	5	8	3	050	4	34.69	0.34
327	0000	4/30	13°52'N	153°45'W	78.2	080	14	79.4	73.6	1012	03	5,4	7	7	3	050	4	34.57	0.34
328	0600	4/30	14°40'N	154°09'W	77.9	080	15	77.7	73.1	1013	00	X	X	7	3	050	4	34.69	0.28
329	1200	4/30	15°21'N	154°28'W	77.5	060	17	76.0	73.1	1013	00	X	X	7	3	050	4	34.65	0.34
330	1800	4/30	16°09'N	154°52'W	77.3	060	19	77.1	73.2	1015	03	6	7	7	3	050	4	34.63	0.33
331	0000	5/1	16°57'N	155°16'W	77.0	060	15	78.5	72.3	1014	02	6,1	5	8	3	050	4	34.67	0.38
332	0600	5/1	17°42'N	155°40'W	76.6	060	18	75.9	71.7	1015	00	X	X	7	3	050	4	34.64	0.35
333	1200	5/1	18°18'N	155°59'W	75.5	070	22	74.2	70.5	1014	00	8	1	8	4	050	4	34.76	0.29
334	1800	5/1	19°03'N	156°23'W	76.8	230	04	75.5	70.7	1016	03	6	3	7	3	160	1	34.62	0.32
335	0000	5/2	19°49'N	156°44'W	76.3	060	16	77.1	72.2	1015	01	8,2	2	8	3	040	1	34.88	0.28
336	0600	5/2	20°45'N	157°15'W	76.7	080	12	76.4	70.4	1015	80	6	4	8	3	080	1	34.76	0.29

Table 5.--Observations at bathythermograph lowerings, Hugh M. Smith cruise 45 (coded according to H. O. Pub. 606-c, second edition, 1956)

Ser. No.	Time, GCT	Date, 1958	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
1	0002	3/30	19°03'N	155°59'W	76.2	170	12	78.0	68.4	1017	15	1,2,6,4	6	7	2	140	1	-	-
2	0603	3/30	18°29'N	155°22'W	74.4	020	28	73.8	68.0	1018	02	6	7	6	4	080	4	-	-
3	1205	3/30	18°03'N	154°53'W	74.6	060	21	73.0	68.3	1018	01	8	2	6	X	060	1	-	-
4	1810	3/30	17°26'N	154°41'W	75.7	060	20	74.5	69.8	1018	01	8	2	7	4	060	1	-	-
5	0010	3/31	16°45'N	153°41'W	75.5	070	20	76.0	70.8	1016	15	9,8,1	3	6	4	040	1	-	-
6	0602	3/31	16°12'N	153°05'W	75.3	070	24	71.8	70.2	1017	18	9	8	5	4	060	4	-	-
7	1200	3/31	15°48'N	152°33'W	75.6	080	28	73.7	69.7	1017	15	9,8,2	5	6	2	040	4	-	-
8	1805	3/31	15°20'N	152°00'W	76.2	060	26	75.1	69.7	1017	02	8	2	7	4	040	4	-	-
9	0000	4/1	14°46'N	151°35'W	76.7	060	27	77.0	71.5	1015	15	1,3,8,9	7	6	5	060	4	-	-
10	0600	4/1	14°14'N	151°00'W	77.1	070	27	74.5	71.3	1016	02	8	4	6	5	070	4	-	-
11	1205	4/1	13°47'N	150°28'W	77.4	070	24	75.2	70.5	1015	01	8,6	2	6	5	080	4	-	-
12	1805	4/1	13°15'N	149°54'W	77.4	070	26	76.8	72.0	1015	15	8,6	6	7	5	070	4	-	-
13	0010	4/2	12°44'N	149°20'W	79.0	070	25	77.5	73.5	1012	16	1,4,8,9	6	6	4	080	4	-	-
14	0600	4/2	12°11'N	148°46'W	79.2	080	24	77.0	73.1	1014	18	6	6	6	5	080	4	-	-
15	1205	4/2	11°44'N	148°15'W	79.6	070	27	77.2	73.0	1012	02	1,3,8	6	6	4	080	4	-	-
16	1800	4/2	11°12'N	147°42'W	79.0	070	24	78.1	72.2	1013	03	1,3,6,8	2	6	4	070	4	-	-
17	0000	4/3	10°39'N	147°08'W	80.1	050	24	79.0	73.5	1012	01	1,4,8	2	6	4	060	4	-	-
18	0605	4/3	10°08'N	146°29'W	78.5	070	24	78.1	73.2	1013	03	8,6	4	7	4	070	4	-	-
19	1200	4/3	09°42'N	145°56'W	78.5	050	25	78.0	73.1	1012	03	8,4	7	6	3	090	1	-	-
20	1800	4/3	09°10'N	145°18'W	79.0	050	24	78.8	74.1	1012	01	8,6	6	6	3	050	4	-	-
21	2345	4/3	08°38'N	144°50'W	80.0	050	25	79.5	74.0	1010	03	1,6,8	7	6	5	060	4	-	-
22	0600	4/4	08°05'N	144°11'W	80.4	050	20	78.2	75.2	1012	02	6	8	6	5	060	4	-	-
23	1200	4/4	07°38'N	143°38'W	80.8	060	26	78.8	75.2	1010	02	6	8	6	4	040	4	-	-
24	1805	4/4	07°06'N	143°01'W	81.6	050	24	81.6	76.6	1012	02	4,1,6,8	4	6	5	070	4	-	-
25	0000	4/5	06°36'N	142°22'W	81.8	060	25	81.0	78.0	1008	25	6,8	8	5	3	060	4	-	-
26	0600	4/5	06°08'N	141°42'W	82.0	040	16	80.0	77.5	1010	52	6	8	5	5	060	4	-	-
27	1210	4/5	05°44'N	141°01'W	81.7	060	18	80.3	78.0	1007	50	8	8	5	3	070	1	-	-
28	1810	4/5	05°17'N	140°20'W	81.5	110	13	81.2	78.0	1010	51	4,6,8	8	6	3	080	1	-	-
29	0000	4/6	04°37'N	140°00'W	83.8	010	20	81.5	78.0	1007	20	6,8	7	6	4	080	1	-	-
243	0600	4/29	04°17'S	142°51'W	82.9	130	18	82.8	78.5	1009	03	9,8	5	6	2	150	1	-	-
244	1130	4/29	05°04'S	143°18'W	83.2	140	14	83.0	78.0	1008	02	8	2	6	2	XXX	1	-	-
245	1800	4/29	05°53'S	143°49'W	83.8	100	16	83.0	74.9	1010	15	6,1,8,4,9	5	6	2	110	1	-	-
246	2330	4/29	06°45'S	144°15'W	84.2	120	18	84.5	78.0	1007	15	8,9	2	6	2	140	1	-	-
247	0530	4/30	07°36'S	144°40'W	84.6	100	20	84.1	77.0	1010	01	8	2	6	2	150	1	-	-
248	1300	4/30	08°46'S	145°12'W	84.6	100	16	84.0	78.0	1008	80	8,9	7	6	3	140	1	-	-
249	1800	4/30	09°28'S	145°32'W	84.8	110	18	85.0	78.0	1011	01	8,9,1	3	6	3	110	1	-	-
250	2330	4/30	10°17'S	145°55'W	84.6	100	14	84.0	78.1	1008	02	8	2	6	2	120	1	-	-

Table 5.--Observations at bathythermograph lowerings, Hugh M. Smith cruise 45 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Ser. No.	Time, GCT	Date, 1958	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
251	0600	5/1	11°14'S	146°21'W	84.3	100	14	84.0	78.0	1010	02	8	1	6	2	120	1	-	-
252	1120	5/1	12°02'S	146°44'W	84.0	110	14	83.2	76.5	1010	02	8	1	6	2	130	1	-	-
253	1800	5/1	12°54'S	147°17'W	83.9	090	14	83.5	78.5	1011	02	8,9	1	6	2	120	1	-	-
254	2330	5/1	13°32'S	147°58'W	84.0	120	16	84.1	78.0	1010	02	8,9	2	6	2	130	1	-	-
255	0600	5/2	14°19'S	148°45'W	84.2	120	12	83.5	77.5	1010	02	8	1	6	2	090	1	-	-
256	1135	5/2	15°14'S	149°01'W	83.7	140	14	82.6	76.8	1010	02	8	1	6	2	100	1	-	-
257	1800	5/2	16°30'S	149°15'W	83.8	090	14	83.5	77.6	1012	02	8,9	1	6	2	060	1	-	-
258	2335	5/2	17°04'S	149°28'W	83.9	100	16	83.0	76.8	1010	02	1,8,9	3	6	2	090	1	-	-
259	1800	5/7	17°35'S	149°02'W	82.8	040	23	79.4	75.6	1010	02	0	8	6	3	040	1	-	-
260	2355	5/7	16°58'S	148°26'W	83.1	010	18	82.5	74.9	1008	02	0	7	6	3	010	1	-	-
261	0603	5/8	16°18'S	147°52'W	83.1	010	23	83.0	76.3	1011	80	6	8	6	3	010	1	-	-
262	1200	5/8	15°58'S	147°36'W	83.1	020	16	82.5	74.8	1010	01	1,2,4,8	7	6	1	010	1	-	-
263	1800	5/8	15°42'S	147°22'W	83.4	020	18	83.2	76.8	1010	01	4,8	5	6	2	020	1	-	-
264	2355	5/8	14°59'S	146°46'W	83.7	020	12	83.8	75.5	1009	01	4,8	3	6	2	030	1	-	-
265	0600	5/9	14°14'S	146°16'W	83.3	050	12	83.0	76.3	1010	01	4,8	2	7	2	040	1	-	-
266	1200	5/9	13°40'S	145°34'W	83.6	060	15	83.0	76.3	1008	02	4,8	3	6	2	050	1	-	-
267	1800	5/9	13°05'S	144°52'W	83.2	050	14	84.5	77.2	1011	02	8,6	1	6	2	060	1	-	-
268	0000	5/10	12°31'S	144°11'W	84.0	070	10	83.9	76.0	1008	02	8	1	6	2	060	1	-	-
269	0600	5/10	11°57'S	143°32'W	84.5	100	14	83.3	78.2	1010	01	8	1	7	2	060	1	-	-
270	1200	5/10	11°24'S	142°54'W	83.0	110	14	82.5	77.0	1009	00	8	1	6	2	090	1	-	-
271	1800	5/10	10°49'S	142°16'W	83.2	100	18	83.7	75.2	1012	02	8	1	6	3	100	1	-	-
272	0000	5/11	10°18'S	141°40'W	84.0	110	18	84.5	76.2	1007	03	8	2	6	3	100	1	-	-
273	0600	5/11	09°47'S	141°00'W	83.8	110	17	83.0	78.0	1009	01	8	2	7	3	100	3	-	-
274	1200	5/11	09°15'S	140°18'W	83.0	070	12	80.0	76.8	1008	02	8	1	6	3	080	3	-	-
275	1500	5/15	09°12'S	139°38'W	82.8	070	14	82.0	76.2	1010	02	8	1	7	2	070	1	35.90	0.59
276	1800	5/15	09°12'S	139°17'W	83.1	090	12	82.9	76.6	1012	03	8	2	6	2	090	1	35.88	0.56
277	2100	5/15	09°14'S	138°58'W	83.1	100	12	83.0	76.8	1010	02	8	2	7	2	090	1	36.02	0.74
278	0010	5/16	09°08'S	138°40'W	83.1	130	14	82.8	77.0	1008	02	8,1,2	2	6	2	100	1	35.94	0.57
279	0300	5/16	09°07'S	138°24'W	82.8	130	13	82.5	77.5	1008	02	8,1,2	2	7	2	100	1	36.15	0.62
280	0632	5/16	09°08'S	138°04'W	82.6	110	16	82.2	76.0	1010	02	8	1	7	2	120	1	35.91	0.61
281	0900	5/16	09°10'S	137°46'W	82.4	110	14	81.7	76.0	1010	02	8	1	7	2	120	1	35.92	0.58
282	1200	5/16	09°12'S	137°22'W	82.4	100	10	81.6	75.7	1009	02	8	1	6	2	100	1	35.97	0.49
283	1503	5/16	09°14'S	137°06'W	82.3	110	08	81.3	75.2	1010	02	8,1	2	7	2	090	1	35.89	0.58
284	1810	5/16	09°10'S	136°47'W	82.8	110	13	82.2	76.2	1012	02	8,5	2	6	2	110	1	35.90	0.59
285	2100	5/16	09°10'S	136°27'W	82.8	100	12	82.8	75.4	1010	02	8,5	2	7	2	110	1	35.92	0.55

Table 5.--Observations at bathythermograph lowerings, Hugh M. Smith cruise 45 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Ser. No.	Time, GCT	Date, 1958	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
286	0000	5/17	09°10'S	136°06'W	82.7	100	12	82.5	75.2	1010	03	4,2,8	2	7	3	090	1	35.96	0.59
287	0105	5/17	09°05'S	136°07'W	82.7	100	13	82.7	75.5	1009	03	1,2,8	4	7	3	100	1	35.91	0.37
288	0300	5/17	09°09'S	135°53'W	82.6	130	08	82.0	75.5	1010	03	1,2,8	4	7	3	100	1	35.94	0.59
289	0600	5/17	09°10'S	136°08'W	82.5	090	14	82.1	75.0	1012	02	1	2	7	2	090	1	35.93	0.69
290	0900	5/17	09°12'S	136°34'W	82.6	100	11	81.5	76.0	1012	02	X	1	7	2	090	1	35.95	0.59
291	1203	5/17	09°13'S	137°02'W	82.6	080	10	81.2	75.5	1010	02	8	1	7	2	090	1	35.91	0.58
292	1500	5/17	09°14'S	137°20'W	82.7	090	13	81.6	74.8	1011	02	8,1	1	6	2	070	1	35.88	0.54
293	1800	5/17	09°14'S	137°43'W	82.8	080	14	82.9	74.9	1012	03	8,1	2	6	2	090	1	35.88	0.20
294	2100	5/17	09°16'S	138°03'W	83.0	090	12	83.0	75.8	1011	02	8	2	6	2	090	1	35.89	0.55
295	2355	5/17	09°14'S	138°28'W	83.2	080	08	XXX	76.8	1009	02	8,1	2	7	2	080	1	35.92	0.63
296	0300	5/18	09°12'S	138°51'W	82.9	090	12	82.7	75.7	1009	03	8,1	3	6	2	090	1	35.92	-
297	0610	5/18	09°12'S	139°04'W	82.8	130	12	82.2	75.5	1011	01	8	1	8	2	100	1	36.12	0.69
298	1500	5/19	09°12'S	139°40'W	82.7	110	18	81.8	75.0	1012	02	8	2	7	2	080	1	35.91	0.55
299	1800	5/19	09°12'S	140°04'W	83.1	100	18	82.9	75.3	1013	02	8,6	2	8	2	080	1	35.90	0.42
300	2100	5/19	09°16'S	140°28'W	83.5	090	20	83.8	76.2	1013	02	8	2	8	2	100	1	35.94	-
301	0000	5/20	09°14'S	140°49'W	83.6	100	10	83.8	76.2	1010	02	8,1	2	7	2	100	1	35.94	-
302	0300	5/20	09°12'S	141°08'W	83.7	090	19	83.0	76.5	1010	03	2,8,1	2	6	2	080	1	36.00	-
303	0600	5/20	09°12'S	141°19'W	83.2	120	17	83.2	77.0	1012	02	X	2	7	2	080	1	35.92	-
304	0900	5/20	09°12'S	141°39'W	83.6	140	14	83.2	76.0	1012	02	X	2	7	2	080	1	35.91	-
305	1200	5/20	09°12'S	142°02'W	83.8	100	14	82.4	75.3	1010	02	8	2	7	2	100	1	35.85	0.53
306	1500	5/20	09°12'S	142°16'W	83.7	100	14	82.5	75.4	1012	03	8,6	5	7	2	100	1	35.88	0.48
307	1825	5/20	09°18'S	142°38'W	84.0	070	12	83.8	76.3	1013	01	4,8	1	6	2	100	1	36.10	-
308	2100	5/20	09°17'S	142°54'W	84.2	090	14	83.9	76.3	1012	01	4,8	1	6	2	100	1	-	-
309	0000	5/21	09°14'S	143°14'W	84.3	070	11	XXX	77.3	1009	02	8,3	1	7	2	070	1	35.88	0.48
310	0300	5/21	09°11'S	143°22'W	84.2	090	12	83.9	76.3	1009	15	6,9,8	3	6	2	090	1	35.90	-
311	0605	5/21	09°12'S	143°06'W	84.0	100	12	83.6	77.2	1010	02	X	3	6	2	090	1	35.89	-
312	0900	5/21	09°13'S	142°44'W	83.8	120	14	82.5	77.2	1011	02	X	3	6	2	090	1	35.91	0.52
313	1200	5/21	09°14'S	142°22'W	83.0	120	14	81.0	76.0	1010	64	X	4	6	2	090	1	35.93	-
314	1500	5/21	09°15'S	142°05'W	83.4	080	18	82.4	75.7	1010	03	8,4	1	7	3	090	1	35.94	0.53
315	1800	5/21	09°15'S	141°43'W	83.8	080	10	83.3	75.8	1011	02	8,6	1	6	2	090	1	35.91	0.37
316	2100	5/21	09°14'S	141°21'W	84.0	130	15	81.5	78.4	1010	15	8,6	6	6	2	100	1	35.91	0.26
317	2240	5/21	09°14'S	141°13'W	83.8	130	10	81.0	76.8	1009	95	8,6	7	6	2	110	1	35.89	0.53
318	0005	5/22	09°14'S	141°04'W	83.5	100	12	82.8	77.7	1008	91	9,6	6	6	2	100	1	35.91	0.53
319	0300	5/22	09°13'S	140°50'W	83.2	090	18	81.8	76.8	1008	15	9,6,1,3	3	7	2	090	1	35.87	-
320	0615	5/22	09°12'S	140°34'W	82.8	100	20	80.3	76.5	1008	81	6	4	7	3	090	1	35.89	0.53

Table 5.--Observations at bathythermograph lowerings, Hugh M. Smith cruise 45 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Ser. No.	Time, GCT	Date, 1958	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
321	0900	5/22	09°12'S	140°14'W	82.7	110	14	82.4	76.5	1008	02	8	2	7	3	110	1	35.86	0.55
322	1500	5/23	09°12'S	139°40'W	82.3	090	12	81.2	74.0	1010	02	8	1	7	2	090	1	35.90	0.59
323	1800	5/23	08°48'S	139°40'W	82.8	090	12	82.7	74.3	1011	03	1,8	5	7	2	090	1	35.89	0.27
324	2100	5/23	08°24'S	139°40'W	83.1	080	14	83.0	75.3	1009	03	1,2,8	6	7	2	090	1	35.89	0.73
325	0000	5/24	08°09'S	139°42'W	83.2	090	14	82.7	75.5	1008	02	2,8	3	7	3	080	2	35.81	0.63
326	0300	5/24	07°52'S	139°45'W	82.9	090	13	82.6	74.8	1008	02	2,8	4	7	2	090	1	35.74	0.61
327	0610	5/24	07°39'S	139°42'W	82.7	060	12	81.7	75.3	1009	01	8	1	7	2	080	1	35.30	0.69
328	0900	5/24	07°18'S	139°42'W	82.3	070	13	80.0*	75.5	1010	02	8	1	7	2	080	1	34.94	0.63
329	1200	5/24	06°54'S	139°41'W	82.3	070	11	80.5	75.5	1009	02	X	1	7	1	080	1	35.02	0.54
330	1500	5/24	06°38'S	139°39'W	82.3	070	09	80.8	75.3	1010	03	8,1	4	7	1	070	1	34.97	0.53
331	1620	5/24	06°31'S	139°39'W	82.4	070	08	81.9	74.8	1010	03	1,2,8	5	6	1	080	1	35.05	0.57
332	2110	5/24	05°58'S	139°36'W	83.4	100	05	83.3*	75.2	1009	01	1,2,8	2	6	1	080	1	35.13	0.68
333	0003	5/25	05°42'S	139°37'W	83.8	070	06	82.3	75.3	1008	02	8	1	6	1	070	1	-	0.59
334	0250	5/25	05°25'S	139°40'W	83.3	120	07	82.0	75.3	1008	03	8,2	4	6	1	100	1	35.15	0.60
335	0618	5/25	05°38'S	139°38'W	82.7	100	07	81.7	74.2	1010	02	8	1	6	1	100	1	35.13	0.64
336	0900	5/25	06°00'S	139°38'W	82.7	100	04	81.2	74.0	1010	02	8	1	7	1	100	1	35.17	0.59
337	1200	5/25	06°24'S	139°38'W	82.7	000	00	81.0	74.8	1010	03	8,1	2	6	1	100	1	35.01	0.57
338	1505	5/25	06°43'S	139°39'W	82.2	140	18	XXX	75.0	1012	63	7	8	5	2	140	1	34.92	0.63
339	1800	5/25	07°04'S	139°40'W	82.4	080	15	79.8	75.2	1012	15	8,6	7	6	2	090	1	34.96	0.60
340	1920	5/25	07°11'S	139°42'W	82.6	080	06	81.9	73.3	1012	15	8,6	7	6	2	090	1	34.97	0.62
341	2100	5/25	07°24'S	139°42'W	83.0	080	05	81.7	75.2	1010	15	6,9,8	2	6	2	100	1	35.43	0.74
342	2340	5/25	07°42'S	139°40'W	83.2	230	07	80.9	75.3	1009	15	8,9,6	7	6	2	100	1	35.75	0.63
343	0300	5/26	08°08'S	139°42'W	83.2	070	05	81.3	75.3	1010	01	8,6	2	6	2	090	1	35.90	0.73
344	0600	5/26	08°26'S	139°40'W	82.9	120	07	81.6	74.1	1011	02	8	2	6	1	090	1	35.88	0.64
345	0900	5/26	08°48'S	139°40'W	83.0	120	06	81.0	73.6	1011	02	8	2	7	1	090	1	-	-
346	1502	5/27	09°14'S	139°40'W	82.3	070	16	80.8	74.7	1011	02	8,4	1	7	2	070	1	35.88	0.47
347	1800	5/27	09°37'S	139°40'W	82.9	080	22	81.9	73.3	1012	03	1,8,6	2	6	2	090	1	-	-
348	2100	5/27	10°00'S	139°40'W	83.0	080	18	82.7	75.3	1012	02	1,8,6	2	7	2	120	1	35.91	0.55
349	0000	5/28	10°20'S	139°40'W	83.2	050	13	82.2	74.8	1009	03	6,8	5	6	2	070	1	35.95	0.57
350	0300	5/28	10°41'S	139°40'W	82.9	050	18	82.7	75.3	1010	01	1,8	2	6	2	070	1	35.91	0.59
351	0608	5/28	10°54'S	139°38'W	82.7	050	16	82.0	75.8	1011	01	8	1	6	2	070	1	35.93	0.59
352	0900	5/28	11°12'S	139°39'W	82.7	030	17	81.3	76.1	1011	02	8	1	7	2	040	1	35.95	0.49
353	1200	5/28	11°30'S	139°39'W	82.8	060	12	81.7	76.8	1010	02	8	1	6	1	050	1	36.00	0.46
354	1500	5/28	11°45'S	139°40'W	82.6	030	16	81.3	75.8	1011	02	8	2	7	1	030	1	36.04	0.48
355	1800	5/28	12°04'S	139°41'W	82.7	020	13	82.8	76.2	1013	02	8	2	6	2	010	1	-	-

*Questionable

Table 5.--Observations at bathythermograph lowerings, Hugh M. Smith cruise 45 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Ser. No.	Time, GCT	Date, 1958	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
356	1850	5/28	12°08'S	139°42'W	82.8	020	14	82.7	76.2	1013	15	9,8	2	6	2	010	1	36.04	0.26
357	2100	5/28	12°20'S	139°43'W	82.8	020	17	82.7	76.7	1012	03	6,1,2,9,8	4	6	2	010	1	36.06	0.27
358	0005	5/29	12°38'S	139°41'W	82.9	020	16	83.8*	77.2	1011	02	1,8	6	7	2	020	1	36.06	0.47
359	0300	5/29	12°56'S	139°38'W	82.8	360	12	82.7	76.7	1011	02	1,8	6	6	2	360	1	36.06	0.62
360	0600	5/29	12°38'S	139°39'W	82.5	350	10	82.5	76.0	1013	02	8	4	7	2	020	1	36.08	0.60
361	0900	5/29	12°20'S	139°39'W	82.2	350	10	82.0	75.7	1013	02	8	3	7	2	360	1	36.09	0.58
362	1155	5/29	11°58'S	139°40'W	82.8	020	15	81.2	75.6	1011	02	6,8	4	7	2	020	1	36.09	0.49
363	1500	5/29	11°40'S	139°40'W	82.3	010	12	81.5	75.0	1012	01	8	3	7	2	360	1	36.09	0.58
364	1800	5/29	11°18'S	139°41'W	82.8	020	09	82.6	75.7	1013	02	8	2	6	2	020	1	36.02	0.48
365	1905	5/29	11°10'S	139°44'W	82.8	020	13	82.7	75.2	1012	02	8,1	2	6	2	020	1	36.02	0.58
366	2100	5/29	10°55'S	139°45'W	83.2	020	12	83.4	75.7	1012	03	8,1	3	6	2	020	1	35.97	0.52
367	0000	5/30	10°42'S	139°42'W	83.4	010	08	82.8	74.8	1010	02	8,1	3	7	2	020	1	35.93	0.59
368	0300	5/30	10°24'S	139°36'W	83.4	030	07	83.2	74.3	1010	01	2,8,1	3	7	1	020	1	35.91	0.58
369	0605	5/30	10°08'S	139°34'W	83.3	020	03	82.2	74.6	1012	02	8,2	3	7	1	020	1	35.97	0.49
370	0900	5/30	09°48'S	139°34'W	82.8	040	10	81.6	75.4	1012	01	8	1	7	1	030	1	35.95	0.41
371	1200	5/30	09°25'S	139°34'W	82.6	050	11	81.0	75.2	1011	02	8	4	7	1	020	1	35.95	0.52
372	1925	6/1	08°43'S	140°33'W	83.1	040	18	82.9	76.2	1012	01	6,8,9	5	7	2	050	1	35.93	0.79
373	2100	6/1	08°29'S	140°38'W	83.3	040	16	82.9	75.2	1010	01	6,8,9	2	7	2	070	1	35.93	0.89
374	2100	6/2	07°45'S	140°12'W	83.3	050	14	82.8	74.2	1011	01	8	1	7	1	050	1	35.59	0.49
375	2255	6/2	07°45'S	140°02'W	83.3	090	10	82.4	74.7	1009	02	6,8,9	2	7	2	060	1	35.93	0.51
376	2100	6/3	08°40'S	139°20'W	82.8	080	14	83.5	75.2	1010	01	8	1	7	2	080	1	-	-
377	2150	6/5	09°28'S	138°54'W	82.8	090	16	83.0	77.2	1011	03	8	3	7	3	100	1	35.95	-
378	2100	6/7	10°19'S	138°30'W	82.8	090	18	83.6	75.4	1012	01	8,1	1	7	3	100	3	35.95	-
379	2100	6/8	09°48'S	139°29'W	83.0	060	14	83.3	75.5	1012	02	8,1	2	7	2	090	1	35.97	-
380	0105	6/9	09°34'S	139°48'W	83.3	050	07	82.9	74.8	1010	03	1,8,2	2	7	2	100	1	-	-
381	0255	6/9	09°34'S	139°49'W	83.1	070	12	82.2	75.2	1011	03	1,8,2	3	7	2	070	1	-	-
382	0510	6/9	09°34'S	139°48'W	82.8	090	12	82.2	75.2	1012	02	8,2	2	7	2	090	1	-	-
383	0700	6/9	09°34'S	139°50'W	82.8	090	12	82.6	75.5	1012	02	8	1	7	2	090	1	-	-
384	0900	6/9	09°34'S	139°52'W	82.6	080	10	82.0	77.0	1012	02	X	3	7	2	090	1	-	-
385	1100	6/9	09°34'S	139°49'W	82.5	070	14	82.1	76.0	1012	02	8	2	7	2	090	1	-	-
386	1300	6/9	09°34'S	139°48'W	82.5	090	13	81.4	75.3	1011	02	8	2	7	2	090	1	-	-
387	1500	6/9	09°34'S	139°48'W	82.5	070	14	81.5	75.4	1012	03	6,8	7	7	2	090	1	-	-
388	1700	6/9	09°34'S	139°49'W	82.7	070	12	81.4	75.8	1014	01	8,4	6	7	2	070	1	-	-
389	1900	6/9	09°34'S	139°50'W	82.8	100	17	80.6	76.7	1015	15	9,8	6	7	2	100	1	-	-
390	2100	6/9	09°34'S	139°50'W	83.0	090	09	83.8	76.8	1014	01	9,8	3	7	2	090	1	-	-

*Questionable

Table 5.--Observations at bathythermograph lowerings, Hugh M. Smith cruise 45 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Ser. No.	Time, GCT	Date, 1958	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
391	2255	6/9	09°34'S	139°48'W	83.2	050	10	82.7	76.8	1012	02	8,4	3	7	2	070	1	-	-
392	0300	6/13	08°45'S	139°47'W	82.3	120	10	81.8	76.2	1011	02	6,8,9	2	7	2	070	1	-	-
393	0600	6/13	08°31'S	139°30'W	82.3	110	13	81.6	75.4	1012	01	8	1	7	3	090	1	-	-
394	0900	6/13	08°14'S	139°11'W	82.3	120	12	81.3	75.3	1013	02	8	1	7	2	120	1	-	-
395	1200	6/13	07°53'S	139°00'W	82.3	090	14	81.0	76.0	1012	02	8	1	7	2	120	1	-	-
396	1515	6/13	07°24'S	139°02'W	82.3	090	14	81.0	75.5	1012	03	8	3	7	1	120	1	-	-
397	1750	6/13	06°59'S	139°05'W	82.3	100	11	82.7	76.1	1014	02	1,8	3	7	1	100	1	-	-
398	2100	6/13	06°33'S	139°08'W	82.9	100	11	83.2	77.4	1013	03	8,9	4	8	1	100	1	-	-
399	0000	6/14	06°06'S	139°11'W	83.1	090	10	82.1	77.4	1011	15	4,8,9	6	6	1	100	1	-	-
400	0300	6/14	05°38'S	139°14'W	82.8	120	10	82.2	76.5	1011	15	6,2,9,8	3	6	1	120	1	-	-
401	0600	6/14	05°17'S	139°14'W	82.3	110	10	81.3	77.0	1013	01	X	1	7	1	120	1	-	-
402	0900	6/14	04°49'S	139°18'W	82.2	110	12	81.0	77.0	1013	01	X	1	7	1	120	1	-	-
403	1200	6/14	04°20'S	139°23'W	81.9	110	08	80.2	76.0	1011	00	8	1	7	1	120	1	-	-
404	1500	6/14	03°52'S	139°27'W	81.8	120	12	80.3	76.0	1011	00	8	2	7	1	130	1	-	-
405	1800	6/14	03°24'S	139°31'W	82.0	120	14	82.4	77.0	1013	03	8,1	2	6	1	120	1	-	-
406	2050	6/14	02°56'S	139°34'W	82.4	120	13	82.8	77.4	1012	02	8,4	2	6	1	120	1	-	-
407	0000	6/15	02°29'S	139°37'W	82.1	080	10	82.0	77.0	1010	01	8	6	7	1	110	1	-	-
408	0300	6/15	02°05'S	139°40'W	81.1	080	10	81.0	76.1	1010	01	8	3	7	1	110	1	-	-
409	0600	6/15	01°42'S	139°40'W	80.7	100	12	80.8	76.1	1012	00	X	X	7	1	110	1	-	-
410	0900	6/15	01°16'S	139°42'W	80.2	090	09	80.0	75.3	1012	00	8	1	7	1	130	1	-	-
411	1200	6/15	00°48'S	139°43'W	80.4	090	08	79.0	75.8	1010	02	8	1	6	1	100	2	-	-
412	1500	6/15	00°22'S	139°44'W	80.2	090	09	79.6	75.5	1010	03	8	2	6	1	100	2	-	-
413	1825	6/15	00°01'S	140°02'W	81.1	110	10	81.2	76.0	1012	02	8	2	7	0	080	0	-	-
414	1945	6/15	00°00'	140°03'W	81.3	120	09	82.0	77.2	1012	03	8	3	6	1	100	2	-	-
415	2100	6/15	00°08'N	140°10'W	81.8	100	09	82.2	76.3	1011	03	8	5	7	2	130	1	-	-
416	0000	6/16	00°29'N	140°30'W	83.0	120	08	82.0	76.0	1009	02	8	6	7	2	120	1	-	-
417	0300	6/16	00°49'N	140°50'W	83.1	100	12	81.8	75.6	1008	02	8	5	7	2	100	1	-	-
418	0600	6/16	01°06'N	141°04'W	82.9	110	12	81.9	76.2	1009	01	8	1	6	2	110	1	-	-
419	0900	6/16	01°29'N	141°22'W	82.8	100	10	81.8	75.7	1010	02	8	1	6	1	110	1	-	-
420	1200	6/16	01°52'N	141°40'W	82.8	100	11	81.6	75.5	1008	02	8	1	7	1	110	1	-	-
421	1500	6/16	02°15'N	141°59'W	82.7	110	07	81.5	75.2	1008	02	8	1	7	1	110	1	-	-
422	1800	6/16	02°36'N	142°11'W	82.8	120	11	82.4	75.0	1010	02	8	3	7	1	110	1	-	-
423	2055	6/16	03°00'N	142°23'W	82.9	120	11	82.9	76.0	1010	01	8	1	6	2	130	1	-	-
424	0000	6/17	03°24'N	142°35'W	83.4	120	10	83.2	75.8	1008	01	8	1	6	0	120	1	-	-
425	0300	6/17	03°46'N	142°48'W	83.2	120	10	82.8	76.0	1008	02	8,1	1	6	1	130	1	-	-

Table 5.--Observations at bathythermograph lowerings, Hugh M. Smith cruise 45 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Ser. No.	Time, GCT	Date, 1958	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
426	0600	6/17	04°02'N	142°58'W	83.0	130	12	82.1	76.2	1010	02	8	1	7	1	110	1	-	-
427	0900	6/17	04°23'N	143°10'W	83.1	130	12	81.8	76.2	1010	02	8	1	7	1	110	1	-	-
428	1200	6/17	04°45'N	143°23'W	83.2	130	13	82.0	75.5	1009	03	8	2	7	1	120	1	-	-
429	1500	6/17	05°06'N	143°36'W	83.3	090	16	82.5	76.5	1009	25	6	7	6	1	120	1	-	-
430	1800	6/17	05°27'N	143°48'W	82.9	090	12	78.0	76.5	1011	81	9,8,6	8	6	1	080	1	-	-
431	2100	6/17	05°48'N	144°02'W	83.0	220	07	78.8	76.7	1011	25	6,9,8	7	5	1	090	1	-	-
432	0000	6/18	06°07'N	144°12'W	83.0	290	03	80.2	77.0	1010	80	6,9,8	8	7	1	090	1	-	-
433	0300	6/18	06°28'N	144°25'W	84.0	110	06	80.3	77.1	1010	15	6,8	6	7	2	090	1	-	-
434	0600	6/18	06°48'N	144°40'W	83.5	120	11	81.7	77.0	1011	00	X	X	7	2	090	1	-	-
435	0855	6/18	07°00'N	144°48'W	83.1	110	12	80.8	77.0	1012	25	X	X	7	2	090	1	-	-
436	1200	6/18	07°19'N	145°03'W	83.2	090	15	81.6	77.5	1010	01	8	2	6	2	080	1	-	-
437	1500	6/18	07°37'N	145°19'W	82.9	100	10	81.7	76.8	1010	15	8,6	2	6	2	050	1	-	-
438	1800	6/18	07°57'N	145°37'W	82.8	080	09	82.8	77.8	1012	15	4,1,9,8	2	6	2	060	1	-	-
439	2100	6/18	08°16'N	145°54'W	83.0	060	09	83.0	77.7	1012	02	1,4,8	4	7	1	060	1	-	-
440	0000	6/19	08°35'N	146°10'W	83.2	060	09	82.9	77.1	1011	01	8	3	7	2	050	1	-	-
441	0300	6/19	08°53'N	146°26'W	83.0	050	11	82.5	77.0	1010	01	8	2	7	2	050	1	-	-
442	0600	6/19	09°13'N	146°43'W	82.7	040	14	81.6	76.8	1012	02	8	2	6	2	040	1	-	-
443	0900	6/19	09°31'N	146°55'W	82.4	040	14	81.3	75.4	1012	13	8,9	2	6	2	030	1	34.07	-
444	1200	6/19	09°53'N	147°14'W	82.0	030	14	80.1	76.0	1012	50	8	6	7	2	030	2	34.05	-
445	1500	6/19	10°16'N	147°34'W	81.5	030	16	80.1	77.0	1011	50	1,8,9	5	7	2	030	2	34.13	-
446	1800	6/19	10°38'N	147°54'W	82.0	050	16	80.6	77.6	1012	25	4,8,9	7	6	2	030	1	34.36	-
447	2100	6/19	11°00'N	148°13'W	82.0	040	18	81.4	78.0	1012	15	1,8,9	7	7	3	040	1	34.33	-
448	0000	6/20	11°21'N	148°30'W	82.0	050	21	81.4	77.8	1012	16	1,2,8,6,5	6	6	4	040	3	34.36	-
449	0300	6/20	11°40'N	148°47'W	81.1	060	20	81.3	77.6	1011	16	2,7,4	6	6	4	050	3	34.42	-
450	0600	6/20	12°02'N	149°03'W	80.5	050	22	80.0	77.0	1013	01	1,8	4	7	3	050	3	34.47	-
451	0900	6/20	12°18'N	149°14'W	79.3	050	22	78.5	76.1	1014	01	X	2	7	3	050	3	34.60	-
452	1200	6/20	12°38'N	149°32'W	79.2	050	16	77.7	76.0	1013	00	X	4	6	3	050	3	34.60	-
453	1500	6/20	12°58'N	149°50'W	79.6	050	22	78.0	75.6	1013	03	8	6	7	3	050	3	34.67	-
454	1800	6/20	13°18'N	150°05'W	79.7	060	21	78.3	75.3	1014	60	7	8	5	3	050	3	34.69	-
455	2100	6/20	13°38'N	150°22'W	79.4	060	21	78.0	74.3	1015	01	2,8,4	5	6	3	060	3	34.67	-
456	0000	6/20	13°59'N	150°39'W	79.1	050	22	78.3	74.0	1014	02	1,3,4,8	5	7	3	060	3	34.65	-
457	0300	6/21	14°20'N	150°54'W	79.0	050	20	78.2	73.2	1014	03	1,6,8	6	7	3	050	3	34.65	-
458	0600	6/21	14°41'N	151°10'W	78.0	070	20	77.9	72.5	1015	03	6,8	6	6	3	050	3	34.61	-
459	0900	6/21	14°58'N	151°22'W	77.9	080	20	77.2	72.0	1016	01	8	1	7	3	050	3	34.54	-
460	1210	6/21	15°20'N	151°38'W	77.8	070	18	77.1	72.0	1015	01	8	2	6	3	050	1	34.54	-

Table 5.--Observations at bathythermograph lowerings, Hugh M. Smith cruise 45 (coded according to H. O. Pub. 606-c, second edition, 1956) (cont'd)

Ser. No.	Time, GCT	Date, 1958	Latitude	Longitude	Bkt. temp., °F.	Wind		Air temp.		Barometer, mb.	Weather	Clouds		Visibility	Sea	Swell		Surf. sal., ‰	Surf. PO_4-P, µg at./L.
						Dir., °T.	Force, kt.	Dry bulb, °F.	Wet bulb, °F.			Type	Cover			Dir. °T.	Amt.		
461	1500	6/21	15°41'N	151°55'W	77.8	070	16	76.8	70.8	1015	03	8,4	3	6	3	050	1	34.63	-
462	1800	6/21	16°03'N	152°12'W	77.1	040	16	77.0	71.6	1017	20	0,6,8	7	5	2	050	1	34.61	-
463	2100	6/21	16°26'N	152°30'W	77.0	060	19	77.0	71.5	1016	01	4,6,8	3	7	3	050	3	34.60	-
464	0000	6/22	16°43'N	152°50'W	77.1	050	15	78.9	71.1	1015	02	6,8	2	6	3	030	2	34.69	-
465	0300	6/22	16°59'N	153°15'W	77.2	050	16	77.5	71.0	1015	03	6,8	3	7	3	050	2	-	-
466	0600	6/22	17°14'N	153°40'W	77.1	050	16	77.2	69.7	1015	01	8	2	6	2	050	1	-	-
467	0900	6/22	17°29'N	153°56'W	77.1	070	15	76.6	71.2	1016	02	8	2	6	2	010	1	-	-
468	1200	6/22	17°46'N	154°19'W	76.9	050	09	76.3	71.0	1015	50	0	4	6	2	050	1	-	-
469	1500	6/22	18°04'N	154°42'W	76.9	050	09	76.6	70.0	1015	02	1,6,8	3	7	2	050	1	-	-
470	1800	6/22	18°22'N	155°06'W	77.1	060	13	77.4	71.3	1016	01	6,8	1	7	2	040	1	-	-
471	2100	6/22	18°40'N	155°30'W	77.1	060	13	77.4	74.0	1016	03	6,8	2	7	2	040	1	-	-
472	0000	6/23	18°58'N	155°51'W	77.7	120	18	77.9	71.6	1015	03	6,8	3	7	2	090	1	-	-
473	0300	6/23	19°16'N	156°08'W	78.2	230	04	77.8	72.2	1013	15	4,6,8	5	7	1	280	1	-	-
474	0600	6/23	19°36'N	156°26'W	77.9	230	13	77.2	71.0	1014	03	4,6,8	7	6	1	280	1	-	-
475	0900	6/23	19°52'N	156°40'W	77.5	320	09	77.0	70.3	1015	01	4,8	2	8	1	XXX	1	-	-
476	1200	6/23	20°14'N	156°56'W	77.6	070	17	76.2	71.9	1014	00	8	3	8	1	060	1	-	-
477	1500	6/23	20°36'N	157°12'W	77.0	010	12	75.4	70.1	1014	03	8	5	8	1	060	1	-	-

Table 6.--Weather observations (USWB 1210-F), Charles H. Gilbert cruise 35[1/]

Date, 1957	Latitude	Longitude	Time, GCT	Visibility	Wind		Weather		Pressure			Temperature			Clouds						Waves		
					Direction	Speed, kt.	Present	Past	Bar. corr., mb.	Characteristic	Amt. change	Dry bulb, °F.	Wet bulb, °F.	Sea water, °F.	Total amount	Amount low	Type low	Height low	Type middle	Type high	Direction	Period	Height
10/4	18.9°N	155.9°W	0000	99	11	10	03	1	1011.9	7	2.7	80.0	74.5	80.2	5	5	4	6	0	0	11	2	2
10/4	18.2°N	155.5°W	0600	97	08	13	00	1	1013.5	1	1.7	79.9	75.0	79.2	3	3	1	5	0	0	11	2	2
10/4	17.4°N	155.1°W	1200	99	08	14	00	0	1012.5	7	1.4	78.0	73.8	78.0	X	X	X	X	X	X	09	2	3
10/4	16.7°N	154.6°W	1800	98	08	15	02	0	1013.2	2	0.7	80.0	73.8	79.4	3	3	1	5	0	0	09	2	3
10/5	15.9°N	154.0°W	0000	99	07	10	02	0	1011.2	7	2.0	80.5	75.0	80.0	3	3	4	5	0	0	09	2	3
10/5	15.2°N	153.5°W	0600	97	06	13	02	0	1011.5	3	0.7	80.0	75.0	79.7	3	3	8	5	0	0	09	2	3
10/5	14.4°N	153.1°W	1200	99	08	15	02	0	1010.2	7	1.4	81.0	75.0	81.3	3	3	8	5	0	0	09	2	3
10/5	13.7°N	152.7°W	1800	98	08	14	03	1	1012.5	2	2.0	81.3	76.0	81.1	8	8	8	5	X	X	10	2	3
10/6	12.9°N	152.3°W	0000	98	05	04	03	2	1009.8	7	2.4	81.6	77.0	82.1	8	8	8	5	X	X	10	2	3
10/6	12.2°N	151.8°W	0600	97	08	06	16	6	1012.2	2	2.0	81.0	76.0	82.2	8	8	8	5	X	X	10	2	2
10/6	11.4°N	151.4°W	1200	97	10	10	16	2	1010.8	7	1.4	81.0	76.0	81.5	8	8	8	5	X	X	10	2	2
10/6	10.7°N	150.9°W	1800	97	09	09	14	2	1012.5	2	2.4	83.0	77.0	82.1	8	8	4	5	X	X	09	2	2
10/7	09.9°N	150.4°W	0000	97	09	07	02	2	1010.5	6	1.4	81.6	76.1	82.1	8	8	8	5	X	X	10	2	2
10/7	09.1°N	150.0°W	0600	97	09	14	02	2	1012.9	1	2.0	80.3	76.0	82.2	8	8	8	5	X	X	09	2	2
10/7	07.7°N	149.0°W	1800	97	15	13	02	2	1012.9	1	2.0	84.0	77.2	83.0	6	6	8	5	0	0	12	2	2
10/8	07.0°N	148.6°W	0000	99	12	12	02	1	1009.1	7	2.0	83.8	77.3	83.8	4	4	1	5	0	0	14	2	2
10/8	06.4°N	148.2°W	0600	99	13	08	02	1	1011.5	2	2.4	82.5	78.0	82.3	5	5	4	5	0	0	13	2	2
10/8	05.7°N	147.7°W	1200	97	11	10	01	1	1010.5	6	1.0	81.8	75.3	81.8	2	2	1	5	0	0	13	2	2
10/8	05.0°N	147.3°W	1800	99	13	14	02	0	1012.9	2	2.0	82.0	76.0	81.0	4	4	2	4	0	0	13	2	2
10/9	04.3°N	146.9°W	0000	99	15	11	02	1	1009.1	7	3.1	82.0	74.8	81.8	4	2	1	4	3	0	13	2	2
10/9	03.6°N	146.6°W	0600	99	13	10	02	1	1011.5	2	2.4	81.3	74.0	81.2	1	1	1	4	0	0	12	2	2
10/9	02.9°N	146.2°W	1200	97	15	11	02	0	1010.5	6	1.5	80.0	74.0	80.4	3	1	1	4	3	0	15	2	2
10/9	02.2°N	145.8°W	1800	99	15	09	02	0	1012.5	2	1.7	81.0	76.0	80.6	1	1	1	4	0	0	15	2	2
10/10	01.5°N	145.4°W	0000	99	15	19	03	1	1009.5	6	1.0	80.8	75.1	80.1	8	4	8	4	3	0	14	2	2
10/10	00.8°N	144.9°W	0600	99	12	10	01	1	1011.9	2	1.4	81.0	75.0	79.7	1	1	2	5	0	0	14	2	2
10/10	00.0°	144.4°W	1200	97	11	10	02	0	1010.2	6	0.9	79.3	75.8	79.1	3	3	1	5	0	0	14	2	2
10/10	00.7°S	144.0°W	1800	99	13	11	02	0	1011.9	2	1.4	81.0	76.3	79.7	3	4	1	4	0	0	14	2	2
10/11	01.5°S	143.6°W	0000	99	12	09	02	0	1008.8	6	1.0	80.0	75.0	80.0	2	3	1	4	0	0	13	2	2
10/11	02.4°S	143.3°W	0600	99	11	13	03	1	1011.5	1	2.0	81.2	75.3	79.9	8	8	4	4	X	X	12	2	2
10/11	03.2°S	143.1°W	1200	97	11	13	02	2	1011.5	5	0.7	79.7	75.1	79.3	5	5	2	4	0	0	13	2	2
10/11	04.0°S	142.8°W	1800	99	11	15	01	1	1013.5	1	0.3	81.2	75.3	79.9	0	0	0	9	0	0	11	2	2
10/12	04.8°S	142.5°W	0000	99	12	12	02	0	1009.1	7	2.0	80.6	75.3	80.4	0	0	0	9	0	0	12	2	2
10/12	05.6°S	142.2°W	0600	99	10	11	02	0	1011.5	2	2.0	81.0	75.3	80.3	0	0	0	9	0	0	12	2	2
10/12	06.2°S	141.8°W	1200	97	11	07	01	0	1011.2	6	0.7	80.0	73.0	80.5	1	1	1	4	0	0	12	2	2
10/12	06.9°S	141.4°W	1800	99	11	09	02	0	1014.2	1	1.5	81.2	74.3	81.0	1	1	1	4	0	0	11	2	2
10/13	07.6°S	141.0°W	0000	99	10	09	02	0	1011.5	6	1.7	81.2	74.7	82.0	1	1	1	4	0	0	11	2	2
10/13	08.3°S	140.6°W	0600	99	09	14	02	0	1013.2	1	1.7	82.5	75.5	81.7	1	1	1	4	0	0	11	2	2
10/15	08.2°S	140.8°W	0000	99	09	07	01	2	1011.5	7	1.7	82.2	75.3	82.3	4	4	2	4	0	0	08	2	2
10/18	09.8°S	138.9°W	0000	97	06	15	25	6	1010.5	6	0.9	82.3	78.2	82.0	8	8	2	4	X	X	06	2	2
10/19	10.4°S	138.8°W	0000	98	13	17	03	1	1010.8	7	1.4	82.0	75.0	82.3	6	6	0	8	1	0	12	2	3

[1/] All columns in USWB 1210-F are not included here. Those deleted are:

Column	2	Day of week	Column	23	Course of ship
"	3	Octant	"	24	Speed of ship
"	13	Barometer as read	"	31	Diff. sea-air, °F.
"	14	Barometer as corrected	"	32	Dew point, °F.
"	17	Air temperature, °F.			

Table 6.--Weather observations (USWB 1210-F), Charles H. Gilbert cruise 35 (cont'd)

Date, 1957	Latitude	Longitude	Time, GCT	Visibility	Wind		Weather		Pressure			Temperature			Clouds						Waves		
					Direction	Speed, kt.	Present	Past	Bar. corr., mb.	Characteristic	Amt. change	Dry bulb, °F.	Wet bulb, °F.	Sea water, °F.	Total amount	Amount low	Type low	Height low	Type middle	Type high	Direction	Period	Height
10/22	09.6°S	139.8°W	0000	97	05	12	25	8	1011.5	7	1.0	81.2	75.3	82.2	8	8	7	4	X	X	05	2	2
10/24	09.1°S	139.2°W	1800	99	09	16	02	1	1012.2	1	1.4	82.2	76.0	80.7	4	4	1	4	0	0	09	2	2
10/25	09.1°S	138.8°W	0000	99	09	13	02	1	1012.2	7	2.4	82.2	76.3	81.7	4	4	1	4	0	0	09	2	2
10/25	09.2°S	138.1°W	0600	97	07	09	02	0	1014.6	1	2.0	81.2	75.7	80.3	4	4	2	4	0	0	09	2	2
10/25	09.4°S	137.4°W	1300	97	09	10	01	8	1010.5	5	0.7	80.4	75.4	80.1	2	2	2	4	0	0	09	2	2
10/25	09.4°S	136.7°W	1800	99	09	12	02	1	1015.9	1	1.4	81.3	74.3	80.3	4	4	2	4	0	0	09	2	2
10/26	09.3°S	136.0°W	0000	99	09	09	02	0	1012.2	7	2.4	82.2	74.5	81.0	1	1	1	4	6	0	09	2	2
10/26	09.3°S	136.1°W	0600	97	09	12	02	0	1014.6	1	2.0	81.7	74.7	80.6	2	2	1	4	0	0	09	2	2
10/26	09.2°S	136.5°W	1300	97	06	12	03	8	1012.5	5	0.7	80.4	73.9	80.4	4	4	2	4	0	0	09	2	2
10/26	09.2°S	137.3°W	1800	99	09	09	02	2	1014.9	1	1.4	83.0	75.0	81.3	6	6	2	5	0	0	09	2	2
10/27	09.3°S	138.0°W	0000	99	08	10	02	2	1011.9	6	1.7	83.0	76.0	82.0	7	7	2	5	0	0	09	2	2
10/27	09.3°S	138.8°W	0600	97	10	12	02	1	1013.9	1	1.7	81.1	74.1	81.1	2	2	2	4	0	0	09	2	2
10/27	09.3°S	139.2°W	1300	97	09	10	02	8	1012.5	5	0.2	81.1	75.9	81.4	2	2	2	4	0	0	09	2	2
10/27	09.6°S	139.6°W	1800	99	07	15	03	1	1014.9	2	1.7	81.8	75.2	81.8	6	6	4	4	0	0	08	2	2
10/28	10.2°S	139.6°W	0000	99	09	16	03	2	1011.9	7	1.7	82.0	76.3	82.0	4	4	2	4	0	0	09	2	2
10/28	10.8°S	139.6°W	0600	97	09	15	02	1	1014.6	1	1.7	81.3	76.0	81.7	3	3	2	4	0	0	09	2	2
10/28	11.4°S	139.4°W	1300	96	09	05	25	8	1013.5	3	0.7	78.2	74.9	82.0	7	7	2	4	0	0	09	2	2
10/28	12.0°S	139.5°W	1800	99	07	16	01	1	1015.6	1	1.7	82.2	76.0	81.8	4	4	2	4	0	0	08	2	2
10/29	12.6°S	139.6°W	0000	99	09	15	01	1	1012.9	6	1.4	82.5	75.5	81.5	4	4	2	4	0	0	09	2	2
10/29	12.6°S	139.6°W	0600	96	08	14	02	0	1014.6	2	1.4	81.8	75.8	81.1	4	4	2	4	0	0	09	2	2
10/29	12.2°S	139.4°W	1300	96	08	18	02	1	1013.5	6	0.7	80.2	75.5	81.5	4	4	2	4	0	0	09	2	2
10/29	11.6°S	139.4°W	1800	97	12	14	14	8	1015.2	1	1.7	80.0	76.5	82.0	6	6	2	4	0	0	10	2	2
10/30	11.0°S	139.5°W	0000	98	07	18	03	1	1011.5	7	1.4	81.0	74.5	81.8	7	7	4	4	0	0	09	2	2
10/30	10.2°S	138.7°W	0600	97	08	17	02	2	1013.2	2	1.4	81.5	75.2	81.5	5	5	4	4	0	0	09	2	2
10/30	09.6°S	139.7°W	1300	97	08	17	01	1	1011.2	6	1.4	81.1	74.0	81.3	1	1	2	4	0	0	09	2	2
11/1	08.9°S	139.6°W	1800	99	08	20	02	0	1013.9	0	0.0	83.5	76.0	81.0	2	2	2	4	0	0	08	2	2
11/2	08.1°S	139.6°W	0000	99	08	16	03	1	1009.8	7	1.7	82.0	76.3	81.3	6	6	6	4	0	0	08	2	2
11/2	07.5°S	139.6°W	0600	97	08	16	02	1	1011.9	2	1.4	80.7	75.9	80.5	4	4	1	4	0	0	08	2	2
11/2	07.1°S	139.5°W	1300	96	10	16	02	2	1010.2	5	0.3	80.0	74.5	79.7	4	4	2	4	0	0	08	2	2
11/2	06.5°S	139.5°W	1800	98	08	18	02	1	1012.2	1	1.7	80.8	75.5	80.0	4	4	2	4	0	0	08	2	2
11/3	05.9°S	139.7°W	0000	98	08	12	02	1	1007.8	7	2.4	80.8	75.0	80.9	2	2	2	4	6	0	08	2	2
11/3	05.8°S	139.8°W	0600	96	10	15	02	0	1010.5	2	2.4	80.3	74.8	79.7	4	4	1	4	0	0	08	2	2
11/3	06.5°S	139.8°W	1300	96	11	10	01	0	1009.1	3	0.3	79.9	74.7	79.9	1	1	1	4	0	0	08	2	2
11/3	07.0°S	139.9°W	1800	96	08	14	02	0	1012.5	1	1.4	82.0	76.2	80.8	2	2	4	4	0	0	08	2	2
11/4	07.6°S	139.6°W	0100	98	08	10	15	1	1008.8	5	0.7	81.2	76.2	81.0	7	7	4	4	0	0	08	2	2
11/4	08.4°S	139.5°W	0600	97	10	17	01	1	1011.9	2	2.0	81.5	75.1	80.9	1	1	1	4	0	0	10	2	2
11/4	08.9°S	139.7°W	1300	97	09	09	02	0	1011.2	5	0.0	80.5	74.0	81.3	2	2	1	4	0	0	10	2	2
11/4	09.2°S	140.0°W	1800	99	09	14	02	0	1013.5	1	0.7	84.0	75.0	81.8	2	2	2	4	0	0	09	2	2
11/5	09.2°S	140.6°W	0000	99	09	10	02	0	1008.5	7	2.0	84.0	75.0	82.0	1	1	2	4	0	0	09	2	2
11/5	09.2°S	141.3°W	0600	97	11	15	02	0	1011.2	1	1.5	81.3	76.0	82.0	2	2	1	4	0	0	09	2	2
11/5	09.2°S	142.0°W	1300	97	09	15	03	1	1010.2	5	0.0	81.3	75.0	80.3	4	4	2	4	0	0	09	2	2
11/5	09.2°S	142.3°W	0900	99	09	15	01	0	1012.5	2	1.7	85.0	76.2	82.5	1	1	2	4	0	0	09	2	2
11/6	09.2°S	143.4°W	0000	99	09	09	02	0	1008.8	7	2.0	85.0	76.0	83.1	3	3	1	4	0	0	09	2	2
11/6	09.2°S	143.0°W	0600	97	11	14	02	0	1010.8	2	1.0	82.5	76.0	82.0	4	4	1	4	0	0	09	2	2
11/6	09.3°S	142.3°W	1300	97	09	12	02	0	1009.5	5	0.0	81.8	75.0	82.0	4	4	1	4	0	0	09	2	2
11/6	09.3°S	141.8°W	1800	99	08	18	01	0	1012.2	2	2.4	82.5	75.0	81.6	1	1	2	4	0	0	09	2	2
11/7	09.3°S	141.3°W	0000	99	08	09	02	0	1008.8	7	2.0	83.8	74.2	81.4	1	1	2	4	0	0	09	2	2
11/7	09.3°S	140.7°W	0600	97	09	12	02	0	1010.8	1	1.4	81.4	74.1	81.5	1	1	8	4	0	0	09	2	2
11/7	09.3°S	140.1°W	1300	97	11	14	03	1	1009.1	6	1.2	80.8	74.0	80.8	4	4	4	4	0	0	09	2	2
11/8	09.4°S	140.7°W	1800	99	11	16	02	1	1011.5	1	1.4	83.0	76.0	81.7	4	4	2	4	0	0	11	2	2

Table 6.--Weather observations (USWB 1210-F), Charles H. Gilbert cruise 35 (cont'd)

Date, 1957	Latitude	Longitude	Time, GCT	Visibility	Wind		Weather		Pressure			Temperature			Clouds						Waves		
					Direction	Speed, kt.	Present	Past	Bar. corr., mb.	Characteristic	Amt. change	Dry bulb, °F.	Wet bulb, °F.	Sea water, °F.	Total amount	Amount low	Type low	Height low	Type middle	Type high	Direction	Period	Height
11/9	10.0°S	141.3°W	0000	99	11	16	01	0	1007.8	7	1.4	82.8	75.5	82.4	2	2	1	4	0	0	15	2	2
11/9	10.8°S	141.9°W	0600	99	11	16	01	0	1009.5	2	1.4	83.0	76.5	81.4	2	2	1	4	0	0	13	2	2
11/9	11.5°S	142.4°W	1200	97	11	18	02	0	1009.1	7	0.9	81.5	75.5	82.0	2	2	1	4	0	0	14	2	2
11/9	12.1°S	143.0°W	1800	99	08	11	02	0	1012.2	2	1.4	83.0	77.2	82.6	4	4	1	4	0	0	13	2	2
11/10	12.7°S	143.8°W	0000	99	07	11	01	0	1009.1	6	1.4	84.8	77.0	83.7	2	2	1	4	0	0	12	2	2
11/10	13.3°S	144.5°W	0600	99	07	09	00	0	1010.5	2	0.7	84.8	76.6	82.6	9	X	X	X	X	X	10	2	2
11/10	13.8°S	145.0°W	1200	97	08	07	02	0	1009.5	7	1.0	81.9	75.8	82.3	2	2	1	4	0	0	10	2	2
11/10	14.3°S	145.9°W	1800	98	00	00	15	1	1012.2	2	2.0	82.2	76.0	82.8	6	6	2	4	0	0	09	2	2
11/11	14.6°S	146.3°W	1800	99	14	07	02	0	1012.5	1	1.4	83.4	77.0	83.4	2	2	4	4	0	0	00	0	0
11/12	14.9°S	147.2°W	0000	99	13	13	16	1	1010.5	6	1.4	83.5	75.0	84.0	4	4	2	4	0	0	13	2	2
11/12	14.9°S	148.0°W	1800	99	08	14	02	2	1013.2	2	1.0	83.8	77.0	83.7	4	4	2	4	0	0	10	2	2
11/13	15.0°S	148.0°W	0000	99	15	16	02	1	1010.8	7	1.7	82.5	76.2	83.0	2	2	2	4	0	0	15	2	2
11/13	15.2°S	148.0°W	1800	99	14	15	25	8	1012.5	1	1.4	81.9	75.3	82.5	4	4	2	4	0	0	15	2	2
11/14	15.9°S	148.3°W	0000	98	12	12	15	2	1010.2	6	1.4	82.0	74.0	82.0	7	7	8	4	0	0	15	2	2
11/14	16.5°S	148.7°W	0600	98	11	14	00	0	1012.5	2	1.4	80.0	72.5	80.5	X	X	X	X	X	X	11	2	2
11/14	17.0°S	149.1°W	1200	98	13	15	01	0	1009.8	7	2.0	79.5	72.8	79.3	2	2	1	4	0	0	12	2	2
11/19	17.4°S	149.4°W	0000	98	04	08	15	8	1010.5	6	1.4	81.4	77.0	81.1	6	6	2	4	0	0	07	2	2
11/19	16.8°S	148.8°W	0600	98	02	08	00	X	1011.9	2	1.7	83.0	78.0	81.2	9	X	X	X	X	X	07	2	2
11/19	16.3°S	148.2°W	1200	96	04	08	00	8	1010.5	6	1.4	81.1	76.5	81.3	5	5	X	X	X	X	07	2	2
11/19	15.8°S	147.6°W	1800	99	05	08	01	1	1012.2	1	1.4	83.0	77.0	82.0	3	3	2	4	0	0	08	2	2
11/20	15.3°S	147.0°W	0000	99	05	10	02	1	1009.1	7	1.4	83.2	76.9	83.1	5	3	2	4	0	1	05	2	2
11/20	15.0°S	146.4°W	0600	97	05	08	16	1	1010.5	2	1.7	80.0	76.2	82.5	5	5	X	X	X	X	07	2	2
11/20	14.6°S	145.7°W	1200	94	04	04	00	8	1009.1	7	1.4	81.1	75.1	82.9	6	6	X	X	X	X	07	2	2
11/20	14.1°S	145.1°W	1800	97	06	13	16	8	1011.5	2	1.4	79.0	75.0	82.3	7	7	2	4	2	0	07	2	2
11/21	13.5°S	144.5°W	0000	98	35	06	02	2	1009.1	7	1.4	82.2	76.8	84.0	7	2	1	4	1	0	00	2	2
11/21	12.9°S	143.9°W	0600	98	04	09	01	1	1011.5	2	2.0	83.0	76.0	82.6	0	0	0	9	0	0	00	2	2
11/21	12.4°S	143.4°W	1200	94	04	12	01	0	1010.2	6	1.4	82.3	75.1	82.9	2	2	1	4	0	0	00	2	2
11/21	11.8°S	142.8°W	1800	99	03	13	02	0	1012.5	2	1.7	83.2	76.5	82.0	2	2	1	4	0	0	04	2	2
11/22	11.2°S	142.2°W	0000	99	03	09	02	0	1009.8	6	2.0	83.5	75.6	83.1	3	2	1	4	1	0	04	2	2
11/22	10.6°S	141.7°W	0600	99	08	12	02	0	1012.5	2	2.0	83.0	76.3	82.3	3	3	X	X	X	X	06	2	2
11/22	10.1°S	141.1°W	1200	94	08	11	02	0	1011.2	6	1.5	81.9	76.0	82.5	3	3	X	X	X	X	05	2	2
11/22	09.5°S	140.6°W	1800	99	07	13	15	0	1012.9	1	1.4	81.0	76.2	82.0	3	3	4	4	0	0	05	2	2
11/26	08.0°S	139.7°W	0000	99	06	14	02	0	1009.1	7	1.7	81.9	75.4	81.9	3	3	1	4	0	0	06	2	2
11/27	09.0°S	139.5°W	0000	99	07	17	02	0	1009.1	7	2.0	82.5	76.0	82.1	3	3	2	4	0	0	07	2	2
11/29	10.1°S	139.1°W	0000	99	10	09	03	1	1009.8	7	1.4	84.0	76.8	82.8	6	6	2	4	0	0	12	2	2
12/1	09.4°S	139.9°W	0000	99	05	10	02	0	1007.8	7	2.4	82.9	76.2	83.1	2	2	2	4	0	0	06	2	2
12/1	09.5°S	139.8°W	1800	99	06	07	02	0	1011.2	2	1.4	82.9	75.1	81.5	2	2	2	4	0	0	06	2	2
12/2	09.6°S	139.8°W	0000	99	04	07	02	0	1008.5	7	1.4	83.5	76.2	83.5	2	2	2	4	0	0	08	2	2
12/2	09.6°S	139.8°W	0600	99	07	09	03	0	1011.9	2	2.7	81.1	75.7	82.0	4	4	4	4	0	0	08	2	2
12/2	09.6°S	139.9°W	1200	99	03	12	01	0	1010.2	6	1.4	81.0	75.9	81.8	2	2	4	4	0	0	08	2	2
12/4	07.9°S	140.7°W	1800	99	09	18	03	0	1013.5	2	1.7	82.5	76.0	82.0	4	4	2	4	4	0	09	2	2
12/5	07.1°S	141.1°W	0000	99	05	13	02	2	1010.5	7	1.4	83.0	76.0	82.2	7	7	4	4	0	0	05	2	2
12/5	06.4°S	141.6°W	0600	99	06	13	01	1	1013.2	2	2.4	82.0	76.0	81.8	2	2	1	4	0	0	06	2	2
12/5	05.7°S	142.1°W	1200	97	05	17	03	1	1011.2	7	1.4	81.1	76.2	81.3	5	5	2	4	0	0	06	2	2
12/5	04.9°S	142.5°W	1800	99	09	19	02	1	1013.5	1	1.4	82.2	76.6	81.5	4	4	2	4	3	0	06	2	2
12/6	04.2°S	143.0°W	0000	99	08	13	02	1	1010.5	7	2.4	82.5	76.5	82.3	5	5	4	4	0	0	07	2	2
12/6	03.5°S	143.4°W	0600	99	06	15	01	1	1012.5	2	2.4	82.2	76.5	81.9	2	2	2	4	0	0	07	2	2
12/6	02.6°S	143.6°W	1200	97	07	13	02	1	1011.9	7	2.0	81.8	76.0	81.8	4	4	1	4	0	0	07	2	2
12/6	01.8°S	143.9°W	1800	99	08	16	02	1	1013.5	2	1.0	83.0	77.0	82.1	4	4	1	4	0	0	09	2	2
12/7	01.0°S	144.2°W	0000	99	09	16	02	1	1010.8	7	2.0	83.2	77.0	83.0	7	6	2	4	1	0	09	2	2

Table 6.--Weather observations (USWB 1210-F), Charles H. Gilbert cruise 35 (cont'd)

Date, 1957	Latitude	Longitude	Time, GCT	Visibility	Wind		Weather		Pressure			Temperature			Clouds						Waves		
					Direction	Speed, kt.	Present	Past	Bar. corr., mb.	Characteristic	Amt. change	Dry bulb, °F.	Wet bulb, °F.	Sea water, °F.	Total amount	Amount low	Type low	Height low	Type middle	Type high	Direction	Period	Height
12/7	00.3°S	144.6°W	0600	97	13	07	21	6	1013.9	2	2.7	78.0	77.0	81.8	8	8	4	4	X	X	13	2	2
12/7	00.5°N	145.0°W	1200	97	13	14	01	8	1012.5	7	2.0	81.9	76.1	81.9	4	4	2	4	0	0	13	2	2
12/7	01.1°N	145.4°W	1800	98	14	14	03	1	1014.2	2	1.4	83.2	76.0	82.3	6	6	2	4	3	0	14	2	2
12/8	01.9°N	145.9°W	0000	99	12	13	02	2	1010.8	7	2.0	82.9	77.0	83.1	4	4	2	4	0	0	13	2	2
12/8	02.6°N	146.4°W	0600	99	13	09	02	2	1013.5	2	2.0	83.0	77.5	82.0	6	6	2	4	1	0	13	2	2
12/8	03.3°N	146.9°W	1200	97	11	10	15	8	1011.5	7	2.0	81.5	76.8	82.5	5	5	2	4	0	0	13	2	2
12/8	04.1°N	147.4°W	1800	97	12	10	52	8	1013.9	1	2.0	78.8	76.3	82.0	8	8	2	4	2	X	13	2	2
12/9	04.8°N	147.8°W	0000	98	09	05	03	2	1009.8	7	3.1	82.1	77.9	82.9	8	8	4	4	X	X	11	2	2
12/9	05.6°N	148.2°W	0600	99	07	07	01	2	1011.5	2	1.7	82.0	77.2	82.2	6	6	4	4	0	0	11	2	2
12/9	06.4°N	148.6°W	1200	97	05	07	02	1	1010.2	8	1.4	81.5	75.5	83.5	4	4	1	4	0	0	06	2	2
12/9	07.1°N	148.9°W	1800	99	06	06	02	0	1011.5	2	1.7	83.5	76.0	82.8	4	4	2	4	6	1	06	2	2
12/10	07.9°N	149.4°W	0000	98	06	12	16	2	1008.8	7	1.7	80.5	77.1	83.5	8	7	2	4	2	X	02	2	2
12/10	08.6°N	149.9°W	0600	98	06	16	00	X	1011.2	2	1.7	81.0	76.5	82.1	X	X	X	X	X	X	06	2	2
12/10	09.4°N	150.3°W	1200	96	06	13	02	1	1010.5	7	1.0	81.0	76.4	82.0	5	4	2	4	1	0	05	2	2
12/10	10.2°N	150.8°W	1800	98	07	15	03	2	1013.2	2	2.0	81.2	76.5	80.5	8	8	1	4	4	X	02	3	4
12/11	11.0°N	151.3°W	0000	99	08	16	02	2	1009.8	7	2.0	81.1	77.3	80.9	7	5	2	4	3	0	03	3	4
12/11	11.7°N	151.8°W	0600	99	08	17	00	X	1012.2	2	2.0	81.5	76.0	80.0	4	4	X	X	X	X	05	3	4
12/11	12.4°N	152.4°W	1200	97	06	19	02	2	1011.2	8	1.4	80.1	76.1	80.1	7	3	2	4	5	0	04	3	3
12/11	13.1°N	153.0°W	1800	99	06	18	02	2	1012.5	2	1.7	80.0	76.0	79.8	6	6	1	4	5	0	05	3	3
12/12	13.8°N	153.5°W	0000	98	05	17	03	2	1011.2	7	1.9	80.1	76.0	80.1	8	5	2	4	2	X	05	3	3
12/12	14.6°N	153.9°W	0600	98	06	22	00	X	1013.5	2	2.0	79.0	74.0	79.2	9	X	X	X	X	X	05	3	3
12/12	15.3°N	154.4°W	1200	94	04	24	03	2	1012.9	7	1.2	77.0	73.0	77.9	8	8	2	4	X	X	05	3	3
12/12	16.1°N	154.8°W	1800	97	04	28	03	2	1013.9	2	1.7	77.0	74.0	77.8	8	8	2	4	X	X	05	3	5
12/13	16.8°N	155.3°W	0000	96	05	22	02	2	1012.5	7	1.0	76.5	69.1	77.8	8	8	4	4	X	X	05	3	5
12/13	17.5°N	155.6°W	0600	98	05	22	00	2	1013.9	2	1.4	75.5	69.0	77.3	8	X	X	X	X	X	05	3	5
12/13	18.3°N	156.0°W	1200	96	05	22	00	2	1013.2	7	1.4	74.1	68.0	76.1	6	4	1	4	5	0	04	3	5
12/13	19.1°N	156.2°W	1800	98	10	07	01	1	1014.2	1	1.7	75.5	68.5	76.9	1	1	2	4	0	0	11	2	2

Table 7.--Weather observations (USWB 1210-F), Hugh M. Smith cruise 43[1/]

Date, 1958	Latitude	Longitude	Time, GCT	Visibility	Wind		Weather		Pressure			Temperature			Clouds						Waves		
					Direction	Speed, kt.	Present	Past	Bar. corr., mb.	Characteristic	Amt. change	Dry bulb, °F.	Wet bulb, °F.	Sea water, °F.	Total amount	Amount low	Type low	Height low	Type middle	Type high	Direction	Period	Height
1/4	21.6°N	158.6°W	0600	98	01	25	03	2	1018.3	1	1.4	68.2	63.0	74.0	X	X	X	X	X	X	32	3	8
1/4	21.6°N	158.4°W	1200	97	31	26	02	2	1016.6	7	0.7	68.1	60.2	73.0	X	X	X	X	X	X	32	3	8
1/4	22.3°N	157.9°W	1800	98	36	23	03	2	1018.3	2	2.0	68.4	59.2	72.2	6	2	7	4	6	0	32	3	8
1/5	21.8°N	157.9°W	0000	98	34	21	01	1	1016.6	6	2.7	69.3	60.0	73.0	2	1	8	4	6	0	34	3	3
1/5	21.1°N	157.5°W	0600	97	35	26	03	1	1017.3	3	0.7	70.2	62.9	73.5	X	X	X	X	X	X	34	3	3
1/5	20.5°N	157.0°W	1200	98	02	22	00	1	1018.0	5	0.7	70.3	62.7	74.2	6	5	1	5	6	0	34	3	4
1/5	19.5°N	156.6°W	1800	98	03	20	01	1	1018.0	2	1.4	72.0	65.0	74.8	3	1	7	4	6	0	34	3	4
1/6	18.8°N	156.2°W	0000	99	36	07	02	1	1015.9	6	3.1	73.8	66.4	76.4	3	2	1	5	3	0	34	3	2
1/6	18.1°N	155.7°W	0600	97	06	19	03	1	1016.6	2	1.7	72.9	65.4	75.5	7	X	X	X	X	X	02	3	3
1/6	17.3°N	155.2°W	1200	98	03	21	80	1	1017.6	7	1.4	73.7	65.7	75.9	4	2	1	5	3	0	35	X	3
1/6	16.5°N	154.8°W	1800	98	05	15	01	5	1018.0	2	1.7	71.2	67.5	76.0	7	3	8	5	6	0	05	3	4
1/7	15.8°N	154.4°W	0000	98	07	15	01	1	1016.3	7	2.7	74.6	68.6	76.2	4	4	1	6	0	0	02	3	3
1/7	15.1°N	153.9°W	0600	98	06	19	01	0	1017.3	2	1.4	75.5	68.7	77.1	2	X	X	X	X	X	04	3	3
1/7	14.3°N	153.5°W	1200	98	06	16	15	1	1016.3	7	1.7	75.8	70.6	76.9	5	4	1	5	6	0	03	X	3
1/7	13.6°N	153.0°W	1800	98	04	17	01	1	1016.3	2	1.7	76.3	71.8	77.3	2	2	4	5	0	0	04	2	5
1/8	12.9°N	152.5°W	0000	98	07	17	03	0	1013.2	7	3.1	77.4	72.2	78.5	3	3	4	5	0	0	03	2	4
1/8	12.7°N	152.2°W	0600	97	06	18	01	2	1013.9	2	1.7	78.2	73.8	78.6	9	X	X	X	X	X	06	3	4
1/8	11.6°N	151.9°W	1200	98	08	16	01	1	1013.2	6	1.4	78.2	74.0	78.3	2	2	1	5	0	0	05	3	3
1/8	11.0°N	151.6°W	1800	98	07	18	01	0	1014.2	2	1.7	79.0	74.0	78.5	2	1	8	5	6	0	07	3	3
1/9	10.1°N	151.2°W	0000	98	07	18	02	0	1010.5	7	3.7	79.7	73.8	79.3	2	2	1	6	0	0	06	3	3
1/9	09.5°N	150.8°W	0600	98	07	19	01	0	1012.2	2	0.7	80.3	75.1	80.5	2	X	X	X	X	X	07	3	4
1/9	08.8°N	150.3°W	1200	97	08	19	03	1	1010.8	7	2.0	79.5	74.0	79.2	4	4	4	5	0	0	07	3	4
1/9	08.1°N	150.0°W	1800	98	07	24	01	0	1012.5	2	1.7	81.0	74.0	81.4	3	3	8	5	0	0	07	3	5
1/10	07.5°N	149.4°W	0000	98	06	18	03	1	1009.8	7	2.7	81.6	75.7	82.3	7	4	8	6	6	8	07	3	5
1/10	06.7°N	149.0°W	0600	98	04	19	03	1	1011.2	2	1.0	81.8	76.8	81.7	7	X	X	X	X	X	07	3	4
1/10	06.1°N	148.6°W	1200	97	03	20	25	2	1010.2	6	2.0	78.3	77.3	82.8	9	X	X	X	X	X	07	3	3
1/10	05.5°N	149.2°W	1800	95	08	19	63	6	1012.9	1	2.0	77.2	75.5	82.3	8	8	7	4	0	0	07	3	3
1/11	04.8°N	147.0°W	0000	95	07	28	60	5	1010.2	7	1.7	79.0	77.0	82.5	8	8	7	4	0	0	07	3	4
1/11	04.0°N	147.3°W	0600	96	10	18	02	2	1011.2	1	1.4	83.1	77.0	82.4	8	X	X	X	X	X	11	3	3
1/11	03.6°N	146.9°W	1200	96	12	17	02	2	1009.8	7	1.7	82.1	76.2	82.4	9	X	X	X	X	X	49	X	X
1/11	02.8°N	146.6°W	1800	97	13	17	00	2	1012.2	1	2.4	82.4	77.3	82.3	8	8	5	5	0	0	11	3	3
1/12	02.0°N	146.2°W	0000	97	12	15	02	2	1008.8	7	3.1	82.7	76.0	82.6	7	6	7	5	6	2	11	3	3
1/12	01.3°N	145.9°W	0600	97	11	19	01	1	1011.2	1	2.4	81.8	77.0	82.0	2	X	X	X	X	X	12	3	3
1/12	00.6°N	145.6°W	1200	97	11	18	01	0	1009.8	7	2.0	81.0	75.5	81.6	9	X	X	X	X	X	49	X	X
1/12	00.0°	145.3°W	1800	98	10	14	03	1	1011.5	1	2.4	82.4	76.3	81.9	5	2	1	4	0	6	09	3	3
1/13	00.9°S	144.9°W	0000	98	11	17	02	1	1008.1	7	3.1	82.5	75.7	82.2	2	1	8	5	0	6	09	3	3
1/13	01.6°S	144.5°W	0600	97	11	11	01	0	1010.5	2	2.0	81.7	75.8	82.2	2	X	X	X	X	X	11	3	3
1/13	02.3°S	144.1°W	1200	97	11	11	02	0	1009.5	7	1.0	81.2	76.0	82.2	9	X	X	X	X	X	11	3	3
1/13	03.0°S	143.7°W	1800	98	13	14	02	0	1011.5	2	1.7	82.6	76.6	82.2	3	2	1	4	0	6	10	3	3
1/14	03.8°S	143.3°W	0000	98	09	12	02	0	1008.8	7	2.4	82.5	76.5	83.1	2	2	4	4	0	0	10	3	3

[1/] All columns in USWB 1210-F are not included here. Those deleted are:

Column	2	Day of week	Column	23	Course of ship
"	3	Octant	"	24	Speed of ship
"	13	Barometer as read	"	31	Diff. sea-air, °F.
"	14	Barometer as corrected	"	32	Dew point, °F.
"	17	Air temperature, °F.			

Table 7.--Weather observations (USWB 1210-F), Hugh M. Smith cruise 43 (cont'd)

Date, 1958	Latitude	Longitude	Time, GCT	Visibility	Wind		Weather		Pressure			Temperature			Clouds						Waves		
					Direction	Speed, kt.	Present	Past	Bar. corr., mb.	Characteristic	Amt. change	Dry bulb, °F.	Wet bulb, °F.	Sea water, °F.	Total amount	Amount low	Type low	Height low	Type middle	Type high	Direction	Period	Height
1/14	04.5°S	142.8°W	0600	98	09	11	02	0	1010.5	2	2.0	82.1	76.5	82.8	2	X	X	X	X	X	11	3	3
1/14	05.4°S	142.3°W	1200	98	11	08	00	0	1009.5	7	2.0	81.5	76.2	82.4	9	X	X	X	X	X	11	3	3
1/14	06.1°S	141.9°W	1800	98	07	11	02	1	1012.2	1	2.0	83.5	77.4	82.7	2	2	1	4	0	0	11	3	2
1/15	06.9°S	141.4°W	0000	98	07	11	02	0	1008.8	7	2.4	82.8	76.8	83.4	2	2	4	4	0	0	11	3	2
1/15	07.8°S	141.0°W	0600	98	07	11	02	0	1011.5	2	2.2	82.8	76.8	82.8	2	X	X	X	X	X	10	3	2
1/15	08.6°S	140.5°W	1200	98	07	11	00	0	1009.5	7	2.0	82.0	76.2	82.8	9	X	X	X	X	X	49	X	X
1/18	08.9°S	140.5°W	1800	98	05	18	02	2	1008.8	2	1.4	85.0	77.2	84.0	6	5	2	4	0	6	06	3	3
1/19	08.1°S	140.8°W	0000	98	06	16	01	2	1004.7	7	2.7	86.0	78.5	83.8	5	4	2	4	0	6	06	3	3
1/19	07.7°S	140.4°W	1800	98	06	20	25	1	1008.1	1	1.4	82.5	76.4	82.5	3	3	8	4	0	0	07	3	4
1/20	07.9°S	139.8°W	0000	98	05	14	03	1	1005.4	7	2.0	83.1	76.5	83.2	5	4	1	5	0	8	07	3	4
1/20	08.2°S	139.5°W	1800	98	04	16	01	2	1008.8	1	2.4	82.2	75.8	82.8	7	5	1	4	0	8	07	3	4
1/21	08.9°S	139.2°W	0000	98	06	10	01	2	1006.1	7	1.7	85.5	76.3	83.8	4	3	1	4	0	8	07	3	3
1/21	09.3°S	139.1°W	1800	98	06	16	03	1	1010.8	1	1.4	83.6	78.2	83.0	6	2	2	4	3	0	09	3	4
1/22	09.9°S	138.9°W	0000	98	09	11	15	2	1009.5	7	1.4	82.8	77.7	83.7	7	7	8	4	0	0	08	3	4
1/22	09.9°S	139.0°W	1800	98	06	11	01	1	1012.2	1	1.7	82.8	75.2	83.0	4	3	8	4	0	8	08	3	3
1/23	10.3°S	138.4°W	0000	98	03	14	03	1	1010.5	7	2.0	82.5	74.2	82.4	7	6	4	4	0	8	08	3	3
1/23	10.3°S	138.9°W	1800	99	02	13	02	2	1014.2	1	1.0	83.8	76.8	83.5	5	2	8	4	7	8	08	3	2
1/24	09.5°S	139.8°W	0000	98	05	08	03	2	1011.9	7	1.7	85.8	78.3	84.5	7	1	2	5	2	0	08	3	2
1/24	09.5°S	139.8°W	0600	98	06	08	02	2	1013.2	2	1.7	83.6	76.7	83.5	X	X	X	X	X	X	08	3	2
1/24	09.6°S	139.9°W	1200	98	07	10	02	2	1012.2	7	2.0	84.0	77.8	84.5	X	X	X	X	X	X	08	3	2
1/24	09.6°S	139.9°W	1800	98	04	11	15	2	1013.5	1	1.0	84.2	77.7	83.3	7	4	8	4	0	8	08	3	2
1/25	09.5°S	139.8°W	0000	98	07	08	02	1	1009.8	7	2.4	86.8	78.5	84.8	3	2	4	4	6	0	49	X	0
1/27	08.9°S	139.9°W	1800	98	01	06	60	6	1012.9	0	1.7	79.0	74.8	81.8	7	7	4	4	0	0	02	2	2
1/28	08.9°S	139.8°W	0000	99	07	09	15	6	1009.1	7	2.4	83.4	77.2	83.8	7	3	8	4	6	1	09	3	3
1/28	09.2°S	139.3°W	0600	97	09	14	00	2	1011.5	2	1.4	84.0	76.9	83.8	9	X	X	X	X	X	09	3	3
1/28	09.2°S	138.8°W	1200	97	09	15	00	2	1009.5	7	1.7	82.8	76.2	83.3	9	X	X	X	X	X	09	3	3
1/28	09.2°S	138.1°W	1800	97	06	17	02	2	1012.2	2	1.7	83.0	77.0	83.0	7	4	4	4	6	0	08	3	3
1/29	09.3°S	137.4°W	0000	97	08	10	15	2	1009.5	7	1.4	83.4	76.7	83.2	7	3	2	4	5	9	09	3	3
1/29	09.2°S	136.9°W	0600	97	08	14	00	2	1010.8	2	1.7	82.5	77.3	83.0	9	X	X	X	X	X	08	3	3
1/29	09.2°S	136.3°W	1200	97	08	10	00	2	1009.8	7	1.7	81.0	76.5	82.7	9	X	X	X	X	X	08	3	3
1/29	09.0°S	136.5°W	1800	97	01	11	02	2	1011.2	2	1.7	82.0	77.3	82.8	7	5	4	4	6	0	08	3	2
1/29	09.2°S	137.0°W	2300	94	10	36	61	1	1011.5	7	0.7	75.8	75.6	83.1	8	8	7	3	X	X	09	X	4
1/30	09.2°S	137.1°W	0000	95	11	27	61	6	1010.8	7	1.0	77.6	74.7	82.8	8	8	7	3	X	X	09	X	5
1/30	09.2°S	137.2°W	0100	96	10	31	21	6	1010.5	6	1.4	80.0	73.5	82.8	8	8	7	3	X	X	10	2	5
1/30	09.2°S	137.3°W	0200	96	10	26	01	2	1010.5	5	0.3	80.7	75.0	82.3	8	4	7	3	7	X	08	2	6
1/30	09.2°S	137.4°W	0300	97	11	32	01	2	1011.2	3	1.4	81.0	75.3	82.2	7	3	7	3	6	9	12	2	7
1/30	09.2°S	137.5°W	0600	97	09	26	02	2	1010.5	5	0.3	83.0	76.0	82.7	9	X	X	X	X	X	12	2	7
1/30	09.2°S	138.1°W	1200	97	09	15	00	2	1008.8	5	1.0	83.5	77.0	83.0	9	X	X	X	X	X	12	2	5
1/31	09.2°S	139.6°W	0000	98	03	06	15	6	1011.2	6	1.7	82.0	77.1	83.9	7	2	7	3	2	0	10	2	4
1/31	09.6°S	139.7°W	0600	97	06	16	00	1	1012.2	2	1.4	81.5	77.0	83.8	9	X	X	X	X	X	10	4	4
1/31	10.2°S	139.6°W	1200	97	08	14	00	1	1010.2	7	1.7	81.6	76.2	83.5	9	X	X	X	X	X	10	4	4
1/31	10.9°S	139.7°W	1800	98	09	16	01	2	1012.5	1	2.0	83.6	78.5	83.5	5	5	8	4	0	0	10	4	4
2/1	11.6°S	139.7°W	0000	98	08	20	02	1	1009.5	7	2.0	83.6	77.7	83.9	5	2	1	5	0	6	09	2	5
2/1	12.0°S	139.6°W	0600	97	06	16	01	1	1010.8	2	1.4	83.5	77.3	84.0	2	2	1	4	0	0	07	2	5
2/1	12.5°S	139.6°W	1200	97	08	15	00	1	1010.2	7	1.0	82.5	76.4	83.6	9	X	X	X	X	X	08	2	3
2/1	12.7°S	139.7°W	1800	98	08	15	01	1	1011.5	1	0.7	84.5	77.2	83.8	3	2	4	4	0	8	08	2	3
2/2	11.9°S	139.6°W	0000	98	06	12	03	1	1009.5	6	2.0	88.1*	78.5	84.0	6	3	2	5	0	5	08	2	3
2/2	11.3°S	139.7°W	0600	97	06	10	03	1	1010.8	7	2.0	85.0	77.2	83.9	2	2	1	4	0	0	06	2	3
2/2	10.7°S	139.6°W	1200	97	07	12	02	0	1010.2	7	1.4	83.2	77.0	84.0	2	2	1	4	0	0	07	2	3

*Questionable

Table 7.--Weather observations (USWB 1210-F), Hugh M. Smith cruise 43 (cont'd)

Date, 1958	Latitude	Longitude	Time, GCT	Visibility	Wind		Weather		Pressure			Temperature			Clouds						Waves		
					Direction	Speed, kt.	Present	Past	Bar. corr., mb.	Characteristic	Amt. change	Dry bulb, °F.	Wet bulb, °F.	Sea water, °F.	Total amount	Amount low	Type low	Height low	Type middle	Type high	Direction	Period	Height
2/2	10.0°S	139.6°W	1800	98	05	12	03	0	1012.2	2	1.4	84.0	77.2	83.9	3	2	4	4	6	0	07	2	3
2/3	09.2°S	139.7°W	0000	99	07	13	02	1	1009.5	7	2.2	85.7	78.6	84.3	4	2	4	5	2	8	07	2	3
2/5	09.2°S	140.0°W	1800	99	10	18	00	0	1011.9	1	1.7	82.7	76.4	83.0	3	2	1	4	0	1	09	2	3
2/6	09.2°S	140.8°W	0000	99	09	21	02	0	1008.8	7	2.7	85.0	77.3	84.1	2	1	1	4	0	1	09	2	3
2/6	09.1°S	141.1°W	0600	98	09	20	02	0	1009.8	1	1.4	83.4	76.8	83.9	X	X	X	X	X	X	10	2	3
2/6	09.1°S	141.5°W	1200	98	11	18	02	0	1009.5	3	0.5	83.3	76.9	83.9	3	2	2	4	0	1	10	2	3
2/6	09.1°S	142.2°W	1800	98	09	17	03	0	1011.5	1	1.0	85.4	78.5	84.0	4	4	1	4	0	0	10	2	3
2/7	09.1°S	142.9°W	0000	98	10	16	01	0	1008.5	7	2.4	85.0	77.2	84.8	2	2	1	4	0	0	10	2	3
2/7	09.2°S	143.0°W	0600	98	10	16	00	0	1009.8	2	1.7	84.4	77.3	84.1	X	X	X	X	X	X	10	2	3
2/7	09.2°S	142.4°W	1200	98	09	14	00	0	1009.5	6	1.0	83.5	77.3	83.9	X	X	X	X	X	X	09	2	3
2/7	09.2°S	141.7°W	1800	98	10	21	02	0	1009.8	1	0.7	84.2	77.6	83.9	3	3	1	4	0	0	09	2	4
2/8	09.2°S	141.3°W	0000	98	08	18	03	0	1006.1	6	2.4	85.3	78.8	84.0	4	4	1	5	0	0	09	2	4
2/8	09.2°S	140.7°W	0600	98	09	16	00	0	1008.1	1	1.7	83.7	77.7	83.7	X	X	X	X	X	X	09	2	5
2/8	09.3°S	140.1°W	1200	98	11	17	00	0	1008.5	7	1.0	83.4	77.5	83.2	3	2	1	X	0	9	09	2	4
2/9	08.8°S	139.7°W	1800	99	08	17	02	0	1009.8	1	0.7	83.7	77.4	83.2	2	2	1	4	0	0	08	3	3
2/10	08.0°S	139.7°W	0000	99	08	17	02	0	1006.1	7	2.0	86.5	78.0	84.0	4	4	1	4	0	0	08	3	3
2/10	07.6°S	139.7°W	0600	98	07	20	02	1	1008.8	1	1.7	83.7	77.9	83.3	X	X	X	X	X	X	08	3	3
2/10	06.9°S	139.7°W	1200	98	07	13	01	0	1008.5	6	0.7	82.6	77.6	83.1	2	2	1	4	0	0	08	3	3
2/10	06.2°S	139.6°W	1800	98	09	18	02	0	1010.8	1	1.5	84.4	78.6	82.8	2	2	1	4	0	0	06	3	4
2/11	06.0°S	139.7°W	0000	98	09	12	02	0	1007.5	6	2.7	85.6	78.7	83.3	2	2	1	5	0	0	08	3	3
2/11	05.6°S	139.8°W	0600	98	11	13	80	0	1009.8	2	2.4	83.1	78.4	82.8	X	X	X	X	X	X	08	3	3
2/11	06.3°S	139.6°W	1200	98	11	10	03	1	1009.1	6	1.4	82.3	77.2	82.9	7	1	1	X	5	0	09	3	3
2/11	07.1°S	139.6°W	1800	98	08	14	01	1	1011.5	1	1.7	84.5	78.3	83.2	1	1	1	4	0	0	09	3	3
2/12	07.9°S	139.6°W	0000	98	11	14	03	8	1008.8	7	2.0	83.5	78.8	83.7	6	6	7	4	0	0	09	3	3
2/12	08.5°S	139.7°W	0600	98	11	13	00	1	1011.2	2	2.0	83.0	78.3	83.5	X	X	X	X	X	X	09	3	3
2/12	09.1°S	139.8°W	1200	98	07	17	01	0	1009.8	6	1.7	83.3	76.5	83.3	1	1	1	4	0	0	09	3	3
2/16	08.9°S	140.1°W	0000	98	06	14	00	1	1007.1	6	2.0	87.8	78.0	84.5	4	4	8	5	0	0	11	3	3
2/16	08.3°S	140.6°W	0600	97	07	15	01	0	1007.8	1	1.4	85.0	78.6	84.0	1	X	X	X	X	X	06	3	3
2/16	07.6°S	141.1°W	1200	97	07	17	02	0	1007.5	6	1.5	83.3	77.8	83.8	X	X	X	X	X	X	07	3	3
2/16	06.8°S	141.6°W	1800	98	09	19	01	0	1009.1	2	1.7	84.3	77.5	83.7	2	2	2	4	0	0	09	3	3
2/17	06.0°S	142.0°W	0000	98	08	17	01	0	1006.1	6	XX	85.3	76.5	83.7	1	1	1	5	0	0	06	3	4
2/17	05.2°S	142.4°W	0600	97	09	18	02	0	1007.8	2	2.4	83.7	77.0	83.1	X	X	X	X	X	X	08	3	4
2/17	04.5°S	142.8°W	1200	97	10	17	02	0	1008.1	6	0.9	82.5	77.2	82.8	3	X	X	X	X	X	09	3	4
2/17	03.7°S	143.4°W	1800	98	13	13	01	0	1009.5	2	1.4	84.5	77.8	82.8	1	1	1	4	0	1	13	3	3
2/18	02.9°S	143.8°W	0000	98	11	15	03	1	1007.1	7	2.4	83.6	77.3	82.8	6	1	8	5	7	0	08	3	3
2/18	02.1°S	144.1°W	0600	97	11	15	01	1	1008.5	2	2.0	83.0	78.1	82.3	1	X	X	X	X	X	08	3	3
2/18	01.2°S	144.6°W	1200	97	10	13	00	X	1008.1	6	1.5	82.2	77.7	82.3	X	X	X	X	X	X	08	3	3
2/18	00.4°S	145.1°W	1800	98	12	12	03	1	1010.5	2	2.7	83.0	78.4	81.7	6	6	4	4	0	0	10	3	3
2/19	00.5°N	145.5°W	0000	97	10	15	15	8	1007.5	7	2.5	83.3	79.4	82.0	7	1	8	4	7	0	11	3	3
2/19	01.4°N	146.0°W	0600	97	09	21	01	1	1009.1	1	2.0	83.0	78.2	82.5	2	X	X	X	X	X	09	3	4
2/19	02.1°N	146.3°W	1200	97	09	18	01	0	1008.1	6	1.5	82.5	77.7	82.5	2	X	X	X	X	X	09	3	4
2/19	03.0°N	146.7°W	1800	98	11	17	03	0	1010.2	1	2.0	84.8	79.0	82.9	3	2	4	4	6	0	11	3	4
2/20	03.8°N	147.0°W	0000	98	10	14	02	0	1008.1	7	2.0	86.2	79.8	83.8	2	1	2	4	6	0	10	3	4
2/20	04.7°N	147.4°W	0600	96	10	09	80	8	1009.8	1	2.4	80.6	76.8	82.7	X	X	X	X	X	X	10	3	4
2/20	05.4°N	147.6°W	1200	97	07	19	01	1	1009.1	6	1.4	82.5	78.5	82.8	2	X	X	X	X	X	08	3	4
2/20	06.2°N	148.0°W	1800	97	07	16	03	0	1011.2	1	2.2	83.6	78.4	82.7	3	2	2	5	0	5	07	3	4
2/21	07.1°N	148.3°W	0000	97	07	18	03	1	1010.2	6	1.4	82.5	77.8	83.2	7	7	7	4	0	0	07	3	4
2/21	07.8°N	148.6°W	0600	96	08	20	00	2	1012.2	2	2.0	82.8	76.5	82.1	9	X	X	X	X	X	08	3	4
2/21	08.6°N	149.1°W	1200	97	09	16	01	1	1011.9	6	0.7	81.5	75.6	81.6	2	X	X	X	X	X	08	3	4
2/21	09.4°N	149.7°W	1800	98	09	15	02	0	1014.6	1	1.5	82.6	75.6	81.3	2	2	4	4	6	0	07	3	4

Table 7.--Weather observations (USWB 1210-F), Hugh M. Smith cruise 43 (cont'd)

Date, 1958	Latitude	Longitude	Time, GCT	Visibility	Wind		Weather		Pressure			Temperature			Clouds						Waves		
					Direction	Speed, kt.	Present	Past	Bar. corr., mb.	Characteristic	Amt. change	Dry bulb, °F.	Wet bulb, °F.	Sea water, °F.	Total amount	Amount low	Type low	Height low	Type middle	Type high	Direction	Period	Height
2/22	10.3°N	150.2°W	0000	98	09	14	01	0	1012.5	7	1.9	84.0	76.5	81.8	1	1	8	4	0	0	08	3	4
2/22	11.1°N	150.7°W	0600	97	10	17	00	0	1013.9	2	2.0	82.2	76.2	80.0	9	X	X	X	X	X	08	3	4
2/22	11.9°N	151.0°W	1200	97	06	12	00	X	1014.6	7	0.7	79.0	74.7	78.3	9	X	X	X	X	X	06	3	4
2/22	12.8°N	151.4°W	1800	98	10	11	01	1	1016.3	2	2.0	80.4	74.7	78.0	3	2	1	4	0	1	07	3	2
2/23	13.7°N	151.9°W	0000	98	08	07	02	0	1014.2	7	2.4	80.2	74.2	79.0	2	2	1	4	0	0	08	3	2
2/23	14.5°N	152.5°W	0600	97	08	05	02	0	1015.2	2	1.4	80.8	74.7	79.4	2	X	X	X	X	X	09	3	2
2/23	15.2°N	153.0°W	1200	97	02	04	00	0	1015.2	7	0.7	78.8	73.5	78.4	9	X	X	X	X	X	49	X	X
2/23	16.0°N	153.6°W	1800	98	23	06	01	1	1016.9	2	1.9	77.2	73.3	77.9	2	1	2	5	3	0	29	2	2
2/24	16.7°N	154.2°W	0000	98	24	12	01	5	1015.6	7	1.4	78.0	72.5	77.5	3	2	2	4	0	1	29	3	2
2/24	17.4°N	154.8°W	0600	97	26	11	02	0	1015.9	2	1.4	77.0	72.0	77.1	1	X	X	X	X	X	27	3	2
2/24	18.0°N	155.4°W	1200	97	31	11	00	X	1015.2	7	1.0	76.0	70.5	76.0	9	X	X	X	X	X	49	X	X
2/24	18.8°N	156.0°W	1800	99	34	10	02	2	1016.9	2	1.7	75.2	71.3	76.2	7	4	2	5	6	0	30	2	2
2/25	19.4°N	156.5°W	0000	99	02	14	01	1	1015.9	7	1.4	76.0	71.0	77.0	4	3	4	4	6	0	02	2	3
2/25	20.0°N	157.1°W	0600	97	05	19	02	1	1018.0	1	2.7	74.0	69.4	76.3	3	X	X	X	X	X	04	3	4
2/25	20.7°N	157.6°W	1200	97	36	12	01	X	1019.3	6	0.3	72.1	66.0	75.2	9	X	X	X	X	X	01	3	3

Table 8.--Weather observations (USWB 1210-F), Charles H. Gilbert cruise 38[1/]

Date, 1958	Latitude	Longitude	Time, GCT	Visibility	Wind		Weather		Pressure			Temperature			Clouds						Waves		
					Direction	Speed, kt.	Present	Past	Bar. corr., mb.	Characteristic	Amt. change	Dry bulb, °F.	Wet bulb, °F.	Sea water, °F.	Total amount	Amount low	Type low	Height low	Type middle	Type high	Direction	Period	Height
2/8	21.8°N	158.0°W	1800	99	16	09	03	1	1015.2	2	0.7	73.0	68.3	73.3	6	5	4	5	6	1	32	5	3
2/9	21.6°N	158.7°W	0000	99	28	09	02	1	1015.2	8	0.7	76.1	70.3	74.8	4	2	4	5	8	0	17	5	2
2/9	21.4°N	158.6°W	0600	99	15	09	02	0	1015.2	4	0.0	74.3	72.1	75.2	X	X	X	X	X	X	XX	X	2
2/9	20.7°N	157.5°W	1800	99	14	08	02	0	1015.9	4	0.0	75.7	71.5	75.5	1	1	1	5	0	0	13	4	2
2/10	19.9°N	157.3°W	0000	99	12	02	02	0	1014.2	8	1.4	78.3	72.2	76.5	1	1	1	5	0	0	13	4	1
2/10	19.2°N	156.8°W	0600	98	13	03	02	0	1016.6	3	1.7	75.5	72.5	75.2	X	X	X	X	X	X	13	4	2
2/10	18.5°N	156.4°W	1200	99	09	08	02	0	1015.9	0	0.3	76.0	72.9	75.2	1	1	1	5	0	0	14	4	2
2/10	18.8°N	156.0°W	1800	99	10	09	02	0	1016.9	2	0.7	76.1	73.2	75.6	1	1	2	5	0	0	11	4	2
2/11	17.2°N	155.7°W	0000	99	08	14	03	1	1013.9	7	2.9	76.9	73.2	76.2	6	5	2	5	0	0	10	4	2
2/11	16.5°N	155.3°W	0600	99	07	16	00	1	1015.6	2	1.7	76.2	72.2	75.9	X	X	X	X	X	X	10	4	4
2/11	15.8°N	155.0°W	1200	99	08	17	00	X	1014.6	8	1.4	76.6	72.2	75.7	X	X	X	X	X	X	10	4	4
2/11	15.2°N	154.7°W	1800	99	08	19	01	1	1015.2	2	1.4	78.4	72.5	75.9	1	1	1	5	0	0	12	4	4
2/12	14.6°N	154.4°W	0000	99	08	19	03	1	1012.5	7	3.4	77.3	73.0	77.4	5	5	1	5	0	0	09	4	5
2/12	13.8°N	154.1°W	0600	99	08	21	02	2	1013.9	2	1.5	77.2	71.1	77.2	X	X	X	X	X	X	09	4	5
2/12	13.2°N	153.8°W	1200	99	06	17	00	X	1012.2	7	2.0	77.7	71.6	77.5	X	X	X	X	X	X	09	4	5
2/12	12.5°N	153.4°W	1800	99	08	18	03	X	1013.5	2	1.9	77.9	72.9	77.5	7	6	4	5	3	0	09	4	5
2/13	11.8°N	153.1°W	0000	99	07	21	01	1	1010.5	7	3.4	77.7	72.7	78.4	2	2	1	5	0	0	10	3	5
2/13	11.2°N	152.9°W	0600	99	07	16	02	0	1011.5	2	2.0	78.1	74.6	78.3	1	X	X	X	X	X	10	3	5
2/13	10.5°N	152.6°W	1200	99	08	17	02	0	1010.2	7	2.0	79.3	75.5	78.9	X	X	X	X	X	X	10	3	5
2/13	09.8°N	152.2°W	1800	98	05	14	14	1	1012.9	2	2.0	79.5	76.3	78.9	8	7	7	4	2	X	10	3	5
2/14	09.0°N	151.9°W	0000	98	07	18	21	6	1009.5	7	2.9	80.5	77.8	80.0	8	3	7	4	2	X	10	3	5
2/14	08.3°N	151.5°W	0600	98	09	10	00	6	1010.8	2	1.4	79.8	77.5	81.1	X	X	X	X	X	X	10	3	5
2/14	07.6°N	151.2°W	1200	98	08	13	00	X	1008.8	7	2.0	80.8	78.2	81.4	X	X	X	X	X	X	10	3	5
2/14	07.0°N	150.5°W	1800	98	12	22	62	X	1010.8	2	2.2	77.5	76.9	81.9	8	8	0	X	7	X	10	3	5
2/15	06.3°N	150.1°W	0000	99	10	10	01	6	1007.8	7	2.7	82.0	78.2	82.9	6	4	2	4	6	0	09	3	4
2/15	05.5°N	150.1°W	0600	99	10	07	00	2	1008.5	2	1.4	82.0	78.6	82.8	X	X	X	X	X	X	09	3	4
2/15	05.0°N	150.0°W	1200	99	09	08	00	X	1007.5	7	1.7	81.0	79.0	82.4	X	X	X	X	X	X	09	3	4
2/15	04.7°N	150.2°W	1800	99	09	12	00	X	1009.1	3	1.4	82.8	78.5	82.3	5	3	8	4	8	0	09	3	4
2/16	04.5°N	150.0°W	0600	99	08	08	00	0	1007.5	2	0.9	82.3	78.1	82.6	1	X	X	X	X	X	09	3	3
2/16	03.9°N	150.0°W	1800	99	11	10	03	X	1007.8	2	1.4	82.2	78.2	82.6	3	3	8	4	0	0	09	3	3
2/17	03.5°N	150.0°W	0600	99	11	13	00	X	1006.8	2	1.7	82.5	78.4	82.6	X	X	X	X	X	X	13	3	3
2/17	02.9°N	150.2°W	1800	99	16	16	01	X	1008.8	2	2.0	81.8	77.3	82.3	2	2	1	4	0	0	16	3	3
2/18	02.5°N	150.1°W	0600	99	12	12	00	X	1008.1	2	1.0	82.4	78.0	82.9	X	X	X	X	X	X	12	3	3
2/18	01.9°N	150.3°W	1800	99	11	10	03	X	1010.2	2	1.5	82.9	78.8	82.5	2	2	8	4	0	0	11	3	3
2/19	01.5°N	150.2°W	0600	99	13	05	00	X	1009.5	2	1.4	82.5	78.9	83.2	X	X	X	X	X	X	11	3	3
2/19	00.9°N	150.3°W	1800	99	12	18	01	1	1011.2	2	2.0	83.8	73.6*	82.4	4	3	2	4	1	X	11	3	5
2/20	00.6°N	150.2°W	0600	99	10	10	00	X	1009.8	2	1.4	82.2	78.3	82.2	X	X	X	X	X	X	11	3	4
2/20	00.1°N	150.1°W	1800	99	12	12	15	8	1011.2	2	1.4	82.1	79.3	82.1	6	5	3	4	6	X	12	3	3
2/21	00.2°S	150.0°W	0600	99	12	14	00	X	1010.2	2	2.0	82.2	78.5	82.1	X	X	X	X	X	X	12	3	4
2/21	00.8°S	150.2°W	1800	99	11	13	01	8	1011.5	3	2.0	82.2	78.2	82.2	3	3	2	4	0	0	10	3	4

[1/] All columns in USWB 1210-F are not included here. Those deleted are:

Column	2	Day of week	Column	23	Course of ship
"	3	Octant	"	24	Speed of ship
"	13	Barometer as read	"	31	Diff. sea-air, °F.
"	14	Barometer as corrected	"	32	Dew point, °F.
"	17	Air temperature, °F.			

*Questionable

Table 8.--Weather observations (USWB 1210-F), Charles H. Gilbert cruise 38 (cont'd)

Date, 1958	Latitude	Longitude	Time, GCT	Visibility	Wind		Weather		Pressure			Temperature			Clouds						Waves		
					Direction	Speed, kt.	Present	Past	Bar. corr., mb.	Characteristic	Amt. change	Dry bulb, °F.	Wet bulb, °F.	Sea water, °F.	Total amount	Amount low	Type low	Height low	Type middle	Type high	Direction	Period	Height
2/22	01.1°S	149.8°W	0600	99	06	15	00	X	1010.8	2	1.7	81.8	78.8	82.2	X	X	X	X	X	X	09	3	3
2/22	01.6°S	149.3°W	1200	99	05	16	00	X	1010.5	8	1.4	81.2	78.0	82.1	X	X	X	X	X	X	09	3	3
2/22	02.2°S	148.8°W	1800	99	07	16	01	8	1013.9	1	2.0	82.5	78.0	82.2	1	1	2	5	0	0	09	3	3
2/23	02.7°S	148.3°W	0000	99	06	14	02	0	1010.2	7	2.2	81.9	77.6	82.8	2	2	4	5	0	0	09	3	3
2/23	03.1°S	147.7°W	0600	99	06	10	00	1	1012.2	2	1.5	81.8	77.9	82.6	X	X	X	X	X	X	09	3	3
2/23	03.5°S	147.0°W	1200	99	05	13	00	X	1011.2	7	1.4	79.2	75.9	82.5	X	X	X	X	X	X	09	3	3
2/23	03.9°S	146.4°W	1800	99	05	12	03	8	1013.5	2	1.4	82.0	78.2	82.5	6	6	2	4	0	0	09	3	3
2/24	04.4°S	145.7°W	0000	99	04	06	15	8	1010.2	7	2.2	83.0	78.5	83.5	6	6	9	4	0	0	08	3	2
2/24	05.0°S	145.0°W	0600	99	04	09	00	1	1012.2	2	1.9	82.4	78.0	83.6	X	X	X	X	X	X	08	3	2
2/24	05.6°S	144.4°W	1200	99	03	13	00	X	1010.5	7	2.0	81.5	78.3	83.2	X	X	X	X	X	X	08	3	2
2/24	06.1°S	143.6°W	1800	99	04	11	02	X	1011.9	2	1.7	82.7	78.5	83.3	2	2	2	5	0	0	08	3	2
2/25	06.7°S	142.9°W	0000	99	04	12	03	1	1009.1	7	2.2	82.4	78.4	84.4	4	4	2	5	0	0	06	3	2
2/25	07.2°S	142.2°W	0600	99	04	11	00	1	1011.9	2	2.2	82.6	77.9	84.0	X	X	X	X	X	X	06	3	2
2/25	07.7°S	141.5°W	1200	99	03	07	00	X	1011.2	7	1.0	82.2	77.1	84.1	X	X	X	X	X	X	06	3	2
2/25	08.2°S	140.8°W	1800	99	04	06	01	1	1012.5	1	1.4	83.9	76.4	83.9	3	3	4	4	0	0	06	3	2
2/26	08.9°S	140.3°W	0000	99	05	06	02	0	1010.2	7	1.2	83.5	77.3	84.7	3	2	2	5	3	0	06	3	2
2/28	08.4°S	140.7°W	0000	99	35	07	01	X	1007.5	7	2.0	87.1	78.6	86.3	3	3	4	5	0	0	35	3	2
2/28	07.7°S	140.5°W	1800	99	36	13	02	1	1009.1	3	2.0	83.2	77.6	84.5	3	3	1	4	0	0	36	3	3
3/1	07.8°S	139.8°W	0000	99	34	09	03	1	1007.1	6	1.7	84.9	78.4	84.8	7	2	4	5	3	0	03	3	2
3/2	08.9°S	139.4°W	0000	99	33	09	03	2	1007.5	7	1.5	85.6	79.8	84.8	7	3	2	4	6	0	03	3	2
3/3	09.6°S	138.8°W	0000	99	06	07	01	1	1008.1	6	2.0	83.3	77.7	84.4	3	2	1	4	6	0	03	3	2
3/4	10.4°S	138.8°W	0000	99	06	12	03	1	1008.8	6	1.9	82.9	78.1	84.1	6	4	2	4	3	0	06	3	3
3/4	10.2°S	138.9°W	1800	99	07	14	01	X	1010.8	2	1.7	83.1	77.6	84.2	2	2	2	4	0	0	03	3	3
3/5	09.8°S	139.3°W	1800	98	04	17	25	8	1012.9	2	2.7	80.5	77.1	84.0	7	7	3	3	0	0	03	3	3
3/6	09.5°S	140.0°W	0000	99	04	07	01	1	1008.5	7	2.7	85.3	77.9	84.6	2	2	2	4	0	0	06	3	3
3/6	09.6°S	139.8°W	1800	99	08	17	03	8	1011.5	3	1.5	83.8	77.0	84.0	3	3	4	4	0	0	07	3	3
3/7	09.6°S	139.8°W	0600	99	07	19	01	0	1008.5	3	1.4	83.0	77.7	84.0	3	3	4	4	0	0	08	3	3
3/7	09.6°S	139.8°W	1200	99	11	08	02	0	1008.1	5	0.9	83.6	76.5	83.9	1	1	1	5	0	0	08	3	3
3/7	09.3°S	139.9°W	1800	99	07	09	03	8	1010.8	2	2.4	81.9	75.3	84.0	6	4	4	4	3	0	05	3	3
3/10	10.2°S	141.6°W	1800	99	10	19	03	X	1011.5	2	1.2	85.2	78.6	84.3	3	3	2	5	0	0	10	3	3
3/11	10.7°S	142.3°W	0000	99	10	14	02	0	1008.1	7	2.2	84.8	77.7	84.8	3	3	2	5	0	0	10	3	3
3/11	11.2°S	142.8°W	0600	99	09	14	00	0	1010.5	2	2.4	84.0	77.5	84.0	X	X	X	X	X	X	10	3	3
3/11	11.8°S	143.4°W	1200	99	06	12	00	X	1009.8	6	1.4	82.0	77.7	84.5	X	X	X	X	X	X	10	3	3
3/11	12.3°S	144.0°W	1800	99	13	10	03	8	1012.2	2	1.7	82.0	78.8	84.4	7	7	2	4	0	0	13	3	3
3/12	12.9°S	144.5°W	0000	99	10	07	02	2	1008.8	7	2.5	83.7	76.9	84.6	5	5	2	4	0	0	13	3	3
3/12	13.5°S	145.2°W	0600	99	10	10	00	1	1009.5	2	1.4	83.3	78.6	84.8	X	X	X	X	X	X	13	3	3
3/12	14.1°S	145.8°W	1200	99	10	14	03	X	1009.5	6	1.0	82.8	77.6	84.5	4	4	2	4	0	0	10	3	3
3/12	14.6°S	146.4°W	1800	99	10	10	01	1	1011.5	2	1.4	84.3	78.8	84.5	2	2	4	5	0	0	11	3	2
3/13	14.9°S	147.2°W	0000	99	13	07	03	1	1008.5	7	2.2	84.7	77.9	85.0	6	2	2	5	1	X	11	3	2
3/14	14.9°S	147.8°W	1800	99	08	10	03	X	1012.2	3	2.7	85.0	80.0	84.6	4	2	2	4	1	0	08	3	2
3/15	15.6°S	148.3°W	0000	99	08	14	25	8	1010.2	7	1.7	83.9	79.6	85.0	5	3	9	4	6	0	08	3	2
3/15	16.3°S	148.7°W	0600	99	10	13	00	2	1012.5	2	2.0	84.1	79.2	84.0	X	X	X	X	X	X	08	3	2
3/15	17.1°S	149.2°W	1200	99	08	17	00	X	1012.5	7	0.5	83.5	79.3	84.0	X	X	X	X	X	X	08	3	2
3/20	17.2°S	149.2°W	0000	99	12	12	03	X	1012.2	8	2.0	84.9	77.8	84.1	2	2	2	5	0	0	09	3	2
3/20	16.7°S	148.7°W	0600	99	12	15	00	1	1012.9	2	1.0	84.5	77.9	83.9	X	X	X	X	X	X	09	3	2
3/20	16.2°S	148.1°W	1200	99	10	14	00	X	1011.5	7	1.0	83.8	77.0	84.1	X	X	X	X	X	X	09	3	2
3/20	15.7°S	147.6°W	1800	99	11	12	03	X	1013.5	2	1.5	86.5	78.3	84.0	2	2	2	5	0	0	09	3	2
3/21	15.3°S	147.0°W	0000	99	09	18	02	0	1010.5	7	2.0	84.4	77.3	84.7	2	2	1	4	0	0	09	3	2
3/21	14.8°S	146.4°W	0600	99	09	14	00	0	1012.5	2	1.7	84.6	78.6	84.5	X	X	X	X	X	X	09	3	2
3/21	14.2°S	145.8°W	1200	99	10	15	00	X	1011.2	7	1.4	83.6	77.8	84.4	X	X	X	X	X	X	09	3	2

Table 8.--Weather observations (USWB 1210-F), Charles H. Gilbert cruise 38 (cont'd)

Date, 1958	Latitude	Longitude	Time, GCT	Visibility	Wind		Weather		Pressure			Temperature			Clouds						Waves		
					Direction	Speed, kt.	Present	Past	Bar. corr., mb.	Characteristic	Amt. change	Dry bulb, °F.	Wet bulb, °F.	Sea water, °F.	Total amount	Amount low	Type low	Height low	Type middle	Type high	Direction	Period	Height
3/21	13.7°S	145.3°W	1800	99	10	14	03	X	1013.9	2	2.4	83.9	78.0	84.3	4	4	4	4	0	0	09	3	2
3/22	13.1°S	144.8°W	0000	99	10	12	02	1	1011.2	7	2.0	84.0	78.5	85.0	4	4	2	4	0	0	09	3	3
3/22	12.6°S	144.3°W	0600	99	12	14	00	1	1012.9	2	2.2	85.3	79.1	84.4	X	X	X	X	X	X	09	3	3
3/22	12.0°S	143.8°W	1200	99	10	20	00	X	1010.8	7	2.0	83.5	77.2	84.4	X	X	X	X	X	X	09	3	3
3/22	11.5°S	143.3°W	1800	99	09	15	03	X	1012.5	2	2.0	84.9	78.9	84.1	3	2	2	4	1	0	09	3	4
3/23	11.0°S	142.7°W	0000	99	09	16	02	0	1009.5	7	2.0	85.3	78.8	85.0	3	3	2	4	0	0	09	3	4
3/23	10.5°S	142.1°W	0600	99	12	14	00	0	1011.5	2	2.0	85.7	77.8	84.4	X	X	X	X	X	X	09	3	4
3/23	10.1°S	141.6°W	1200	99	11	20	00	X	1009.5	7	1.9	84.8	77.5	84.2	X	X	X	X	X	X	09	3	5
3/23	09.7°S	141.1°W	1800	99	11	17	03	X	1011.2	2	1.4	85.5	78.2	84.4	2	2	1	4	0	0	09	3	4
3/24	09.3°S	140.6°W	0000	99	10	18	02	0	1007.5	7	2.4	84.8	78.2	84.9	2	2	1	4	0	0	09	3	5
3/26	09.2°S	139.4°W	1800	99	12	14	03	X	1012.2	0	1.4	85.7	79.8	84.0	3	3	2	4	0	0	10	3	2
3/27	09.2°S	138.8°W	0000	98	14	19	03	5	1008.5	6	1.4	84.1	78.0	83.9	5	3	5	4	6	0	10	3	4
3/27	09.2°S	138.2°W	0600	98	08	09	00	2	1011.5	2	1.0	84.2	76.0	83.8	X	X	X	X	X	X	10	3	3
3/27	09.2°S	137.5°W	1200	98	09	10	00	X	1009.5	8	1.0	82.7	75.6	83.8	X	X	X	X	X	X	10	3	3
3/27	09.2°S	137.0°W	1800	99	11	08	01	1	1012.5	1	1.2	86.3	78.1	83.8	3	3	2	4	0	0	09	3	3
3/28	09.2°S	136.3°W	0000	99	08	09	03	1	1009.1	7	1.4	84.9	77.9	84.1	4	4	4	4	0	0	09	3	3
3/28	09.2°S	136.2°W	0600	98	08	11	50	5	1011.9	2	1.7	80.8	76.8	83.8	X	X	X	X	X	X	09	3	3
3/28	09.1°S	136.9°W	1200	98	07	12	00	X	1009.5	7	1.7	82.8	77.7	83.7	X	X	X	X	X	X	09	3	3
3/28	09.0°S	137.5°W	1800	99	05	14	02	0	1011.5	1	1.0	85.7	80.5	84.0	2	2	1	4	0	0	09	3	3
3/29	09.1°S	138.2°W	0000	99	10	14	02	0	1008.8	7	2.0	85.1	79.9	84.4	2	2	2	4	0	0	09	3	3
3/29	09.1°S	138.9°W	0600	98	10	14	00	1	1011.2	2	1.9	84.0	77.5	84.0	X	X	X	X	X	X	09	3	3
3/29	09.1°S	139.4°W	1200	98	09	14	00	X	1009.5	7	1.4	85.0	78.9	84.2	X	X	X	X	X	X	09	3	3
3/29	08.7°S	139.7°W	1800	99	09	12	02	0	1010.2	1	0.2	85.7	80.2	84.2	1	1	1	4	0	0	08	3	3
3/30	07.5°S	139.8°W	0600	99	10	09	00	0	1010.2	2	2.4	84.1	79.2	85.2	X	X	X	X	X	X	08	3	3
3/30	06.9°S	139.7°W	1200	98	10	10	00	X	1009.1	7	1.4	83.5	78.9	83.9	X	X	X	X	X	X	08	3	3
3/30	06.4°S	139.7°W	1800	99	09	14	03	0	1011.2	2	2.0	83.3	79.2	83.3	4	4	1	4	0	0	08	3	3
3/31	05.7°S	139.6°W	0000	98	08	13	01	6	1008.5	7	1.4	84.4	79.0	83.5	5	5	2	4	0	0	08	3	3
3/31	05.7°S	139.7°W	0600	98	11	12	00	8	1011.2	2	2.0	83.0	78.6	83.2	X	X	X	X	X	X	08	3	3
3/31	06.3°S	139.6°W	1200	98	09	11	00	X	1010.2	7	1.4	82.8	78.6	83.2	X	X	X	X	X	X	08	3	3
3/31	07.0°S	139.7°W	1800	99	08	13	03	1	1012.9	2	2.0	84.1	79.0	83.6	5	2	1	4	3	0	08	3	3
4/1	07.6°S	139.6°W	0000	99	04	13	03	1	1009.5	7	2.7	83.9	78.9	84.4	5	4	1	4	3	0	08	3	3
4/1	08.2°S	139.7°W	0600	98	07	09	00	1	1011.9	2	1.9	83.8	79.1	84.3	X	X	X	X	X	X	08	3	3
4/1	08.6°S	140.0°W	1200	99	06	09	02	X	1010.2	6	1.4	83.5	78.1	84.3	1	1	1	4	0	0	08	3	3
4/3	09.1°S	140.0°W	1800	99	08	14	02	0	1012.2	2	1.4	83.1	77.8	84.2	1	1	1	4	0	0	08	3	3
4/4	09.2°S	140.7°W	0000	99	07	11	02	0	1007.8	7	2.5	87.2	78.0	85.1	1	1	1	4	0	0	08	3	3
4/4	09.2°S	141.2°W	0600	98	14	06	02	0	1011.2	2	2.0	84.1	78.0	84.6	2	2	1	4	0	0	08	3	2
4/4	09.1°S	141.9°W	1200	98	34	06	02	1	1010.5	8	1.2	83.5	75.4	84.8	1	1	1	4	0	0	08	3	2
4/4	09.1°S	142.5°W	1800	99	04	06	02	0	1012.5	2	1.9	83.3	75.7	84.7	1	1	1	4	0	0	08	3	2
4/5	09.1°S	143.2°W	0000	99	35	03	03	1	1009.5	7	2.4	85.4	77.0	87.7	5	3	1	4	0	2	08	3	2
4/5	09.1°S	143.0°W	0600	99	09	04	01	1	1009.5	3	0.9	84.1	76.9	86.0	2	X	X	X	X	X	08	3	2
4/5	09.1°S	142.5°W	1200	98	08	07	03	1	1009.1	7	1.0	82.3	75.2	84.7	4	4	2	4	0	0	08	3	2
4/5	09.1°S	141.8°W	1800	99	07	08	02	1	1010.8	2	1.5	84.4	76.3	84.7	3	3	2	4	0	0	08	3	2
4/6	09.1°S	141.1°W	0000	99	06	06	02	0	1006.8	7	2.7	85.5	77.3	86.0	3	3	2	4	0	0	06	3	2
4/6	09.1°S	140.5°W	0600	98	15	05	02	0	1008.8	2	1.5	83.5	75.1	85.6	2	2	2	4	0	0	06	3	1
4/6	09.2°S	140.0°W	1200	98	02	11	02	0	1008.5	6	0.7	82.4	75.9	84.5	2	2	2	4	0	0	06	3	2
4/6	09.6°S	139.7°W	1800	99	03	15	02	0	1009.8	2	0.7	86.2	77.9	84.5	1	1	2	4	0	0	06	3	3
4/7	10.3°S	139.7°W	0000	99	36	14	02	0	1006.8	7	1.7	83.4	77.2	84.8	2	1	1	4	0	0	06	3	3
4/7	10.9°S	139.7°W	0600	99	35	07	00	X	1009.5	2	2.0	84.3	77.3	85.0	X	X	X	X	X	X	05	3	3
4/7	11.5°S	139.8°W	1200	98	02	05	00	X	1008.5	6	1.0	80.5	76.2	84.2	3	X	X	X	X	X	05	3	3
4/7	12.1°S	139.8°W	1800	98	08	10	60	6	1011.2	2	1.7	81.2	77.8	84.0	8	2	2	4	2	X	14	3	3

Table 8.--Weather observations (USWB 1210-F), Charles H. Gilbert cruise 38 (cont'd)

Date, 1958	Latitude	Longitude	Time, GCT	Visibility	Wind		Weather		Pressure			Temperature			Clouds						Waves		
					Direction	Speed, kt.	Present	Past	Bar. corr., mb.	Characteristic	Amt. change	Dry bulb, °F.	Wet bulb, °F.	Sea water, °F.	Total amount	Amount low	Type low	Height low	Type middle	Type high	Direction	Period	Height
4/8	12.7°S	139.8°W	0000	99	09	05	01	6	1008.5	7	2.5	82.7	78.2	85.2	3	1	1	4	8	8	12	3	3
4/8	12.5°S	139.7°W	0600	98	11	05	00	0	1010.5	2	2.0	83.8	77.6	84.3	X	X	X	X	X	X	15	3	3
4/8	12.0°S	139.7°W	1200	98	09	11	00	X	1009.8	7	0.9	83.9	77.6	84.2	X	X	X	X	X	X	15	3	3
4/8	11.4°S	139.7°W	1800	99	06	08	01	X	1011.9	2	1.4	83.8	76.8	83.9	2	1	2	4	0	8	15	3	3
4/9	11.7°S	139.7°W	0000	99	04	08	02	0	1008.5	7	2.0	86.5	77.5	85.3	2	2	2	4	0	0	15	3	2
4/9	10.0°S	139.7°W	0600	98	07	04	00	X	1010.5	2	1.9	84.1	75.6	85.1	X	X	X	X	X	X	15	3	2
4/9	09.4°S	139.9°W	1200	99	07	09	01	1	1009.8	8	0.7	82.9	77.3	84.4	2	2	2	4	0	0	15	3	2
4/11	08.8°S	140.5°W	1800	99	08	08	02	0	1011.5	2	1.0	83.8	78.2	84.8	2	2	2	4	0	0	01	3	2
4/12	08.3°S	140.7°W	0000	99	07	09	03	1	1008.5	6	2.0	86.2	79.0	85.2	5	5	2	4	0	0	02	3	2
4/12	07.7°S	140.5°W	1800	98	10	09	80	X	1012.9	2	1.5	84.9	78.8	84.7	6	6	3	4	0	0	06	3	2
4/13	08.1°S	139.7°W	0600	98	11	14	00	1	1010.8	1	1.4	84.0	78.2	84.8	X	X	X	X	X	X	11	3	4
4/13	08.4°S	139.6°W	1800	99	08	15	01	X	1013.5	2	1.5	84.2	77.4	84.4	2	2	2	4	0	0	10	3	4
4/14	08.8°S	139.5°W	0000	99	09	13	02	0	1009.1	7	2.4	83.5	76.7	84.6	1	1	1	4	0	0	12	3	4
4/14	09.3°S	139.2°W	1800	99	05	10	03	X	1013.5	2	1.7	84.8	77.2	84.4	4	2	2	4	6	0	10	3	3
4/15	09.9°S	139.0°W	1800	99	10	15	02	X	1013.2	2	1.7	84.2	76.7	83.9	6	6	4	4	0	0	10	3	3
4/16	10.3°S	138.7°W	0000	99	10	15	02	2	1009.1	7	2.4	83.6	75.9	84.1	6	2	2	4	6	0	08	3	3
4/16	10.3°S	138.9°W	1800	98	06	15	14	6	1012.5	2	2.4	84.2	78.0	84.0	6	2	3	4	6	0	06	3	3
4/17	09.8°S	139.4°W	1800	98	10	11	14	X	1013.5	2	1.7	83.8	78.6	84.0	7	2	3	4	2	X	06	3	3
4/18	09.6°S	139.8°W	0000	99	08	09	02	1	1010.5	7	2.0	86.4	79.0	85.2	3	3	2	4	0	0	06	3	2
4/18	09.6°S	139.8°W	0600	98	05	12	00	1	1012.9	2	1.4	83.8	77.1	84.5	X	X	X	X	X	X	06	3	2
4/18	09.5°S	139.9°W	1200	98	07	11	00	8	1011.2	7	1.0	82.8	77.5	84.6	X	X	X	X	X	X	06	3	3
4/18	09.6°S	139.8°W	1800	99	08	08	02	X	1013.2	2	1.2	83.2	78.2	84.4	1	1	1	4	0	0	08	3	3
4/22	08.7°S	140.4°W	0000	99	26	03	03	X	1010.8	7	2.4	88.5*	80.9	85.4	3	3	2	4	0	0	06	3	2
4/22	08.0°S	140.8°W	0600	98	08	14	00	1	1012.9	2	1.9	84.4	79.8	84.9	X	X	X	X	X	X	07	3	2
4/22	07.4°S	141.2°W	1200	98	09	13	00	X	1011.2	7	1.7	84.4	79.3	84.7	X	X	X	X	X	X	07	3	2
4/22	06.8°S	141.6°W	1800	99	09	15	02	X	1012.9	2	1.7	84.5	79.1	84.7	3	3	1	4	0	0	07	3	3
4/23	06.1°S	142.0°W	0000	99	11	10	02	0	1008.8	7	2.4	84.3	81.4	84.6	3	3	1	4	0	0	10	3	3
4/23	05.4°S	142.4°W	0600	99	08	10	00	6	1010.5	1	1.4	82.8	79.5	84.2	X	X	X	X	X	X	10	3	3
4/23	04.7°S	142.8°W	1200	99	06	08	00	6	1008.8	7	1.7	80.0	78.1	83.3	X	X	X	X	X	X	09	3	3
4/23	04.0°S	143.2°W	1800	99	05	11	03	1	1011.5	2	2.4	84.5	79.8	83.4	5	3	2	4	3	0	06	3	3
4/24	03.3°S	143.7°W	0000	99	02	10	14	8	1009.1	7	2.0	83.4	78.6	83.7	7	3	3	4	3	0	08	3	3
4/24	02.6°S	144.2°W	0600	98	25	03	00	2	1010.5	2	1.0	80.8	77.8	83.0	X	X	X	X	X	X	08	3	3
4/24	01.9°S	144.6°W	1200	98	03	04	00	X	1008.1	7	2.0	82.2	77.1	83.1	X	X	X	X	X	X	08	3	3
4/24	01.2°S	145.1°W	1800	99	09	07	02	0	1009.8	2	1.7	83.0	78.1	82.7	2	2	1	4	0	0	08	3	3
4/25	00.4°S	145.5°W	0000	99	10	05	02	0	1007.1	7	2.2	84.0	78.1	83.8	1	1	1	4	0	0	08	3	3
4/25	00.4°N	145.9°W	0600	99	10	08	00	0	1008.5	2	2.0	82.2	78.1	82.5	X	X	X	X	X	X	08	3	3
4/25	01.0°N	146.3°W	1200	98	13	14	00	X	1007.5	7	1.7	81.9	78.2	82.3	X	X	X	X	X	X	08	3	3
4/25	01.8°N	146.8°W	1800	99	12	13	03	X	1009.1	2	2.0	84.4	80.0	82.7	4	3	2	4	3	0	08	3	3
4/26	02.5°N	147.3°W	0000	99	12	09	02	2	1006.8	7	1.9	84.0	80.3	83.8	5	3	2	4	1	0	08	3	3
4/26	03.3°N	147.7°W	0600	98	18	09	00	2	1008.8	2	2.0	83.3	78.6	83.4	X	X	X	X	X	X	08	3	3
4/26	04.9°N	148.0°W	1200	98	34	09	60	6	1007.8	8	1.2	80.2	77.9	82.5	X	X	X	X	X	X	08	3	3
4/26	04.6°N	148.4°W	1800	98	36	06	50	6	1010.5	2	1.5	79.4	76.6	81.5	7	1	1	4	7	0	03	3	3
4/27	05.3°N	148.8°W	0000	98	07	18	14	2	1008.1	7	3.1	81.5	78.2	82.5	8	1	1	4	7	X	04	3	4
4/27	06.0°N	149.1°W	0600	98	08	13	00	2	1010.2	2	2.0	80.2	77.1	82.2	X	X	X	X	X	X	03	3	4
4/27	06.7°N	149.4°W	1200	98	06	13	00	6	1008.5	7	1.7	80.2	78.6	82.0	X	X	X	X	X	X	04	3	4
4/27	07.4°N	149.9°W	1800	97	05	19	60	6	1011.2	2	2.0	79.6	77.7	81.5	8	3	7	4	2	X	04	3	4
4/28	08.1°N	150.3°W	0000	97	06	18	21	6	1008.8	7	2.0	83.1	78.4	81.1	7	3	7	4	2	0	04	3	4
4/28	08.9°N	150.7°W	0600	97	06	17	00	6	1009.8	2	1.4	80.0	77.0	81.0	X	X	X	X	X	X	04	3	5
4/28	09.5°N	151.2°W	1200	97	08	20	00	X	1009.1	6	1.2	79.5	76.3	80.9	X	X	X	X	X	X	04	3	5
4/28	10.2°N	151.6°W	1800	98	06	16	03	X	1011.2	2	1.7	79.0	76.2	80.4	3	2	1	4	0	6	04	3	5

*Questionable

Table 8.--Weather observations (USWB 1210-F), Charles H. Gilbert cruise 38 (cont'd)

Date, 1958	Latitude	Longitude	Time, GCT	Visibility	Wind		Weather		Pressure			Temperature			Clouds						Waves		
					Direction	Speed, kt.	Present	Past	Bar. corr., mb.	Characteristic	Amt. change	Dry bulb, °F.	Wet bulb, °F.	Sea water, °F.	Total amount	Amount low	Type low	Height low	Type middle	Type high	Direction	Period	Height
4/29	11.0°N	152.1°W	0000	99	07	16	02	1	1009.5	7	1.7	81.2	77.0	80.5	5	5	2	4	0	0	05	3	5
4/29	11.7°N	152.5°W	0600	98	06	16	00	2	1011.5	2	2.2	79.8	75.6	80.3	X	X	X	X	X	X	05	3	4
4/29	12.4°N	152.9°W	1200	99	07	19	00	6	1010.2	7	2.0	78.0	74.6	79.3	X	X	X	X	X	X	05	3	4
4/29	13.1°N	153.3°W	1800	99	08	16	03	X	1012.9	2	2.0	78.9	74.0	79.0	5	3	2	4	6	0	05	3	4
4/30	13.9°N	153.7°W	0000	98	08	14	03	2	1011.5	8	1.9	79.4	73.6	78.2	7	1	1	4	7	0	05	3	4
4/30	14.7°N	154.1°W	0600	98	08	15	00	2	1013.2	2	1.9	77.7	73.1	77.9	X	X	X	X	X	X	05	3	3
4/30	15.3°N	154.5°W	1200	98	06	17	00	X	1012.9	7	1.4	76.0	73.1	77.5	X	X	X	X	X	X	05	3	3
4/30	16.1°N	154.9°W	1800	98	06	19	03	X	1014.9	2	2.0	77.1	73.2	77.3	7	7	4	4	0	0	05	3	3
5/1	16.9°N	155.3°W	0000	99	06	15	02	2	1013.9	7	1.7	78.5	72.3	77.0	5	4	4	4	0	1	05	3	4
5/1	17.7°N	155.7°W	0600	98	06	18	00	2	1015.2	2	2.0	75.9	71.7	77.0	X	X	X	X	X	X	05	3	4
5/1	18.3°N	156.0°W	1200	99	07	22	00	X	1014.2	8	1.7	74.2	70.5	75.5	1	X	X	X	X	X	05	3	5
5/1	19.0°N	156.4°W	1800	98	23	04	03	X	1016.3	2	1.7	75.5	70.7	76.8	3	3	4	4	0	0	16	3	3
5/2	19.8°N	156.7°W	0000	99	06	16	01	0	1014.6	7	1.9	77.1	72.2	76.3	2	2	1	4	0	8	04	3	4
5/2	20.7°N	157.2°W	0600	99	08	12	80	1	1015.2	2	1.7	76.4	70.4	76.7	4	4	4	4	0	0	08	3	3

Table 9.--Weather observations (USWB 1210-F), Hugh M. Smith cruise 45[1/]

Date, 1958	Latitude	Longitude	Time, GCT	Visibility	Wind		Weather		Pressure			Temperature			Clouds						Waves		
					Direction	Speed, kt.	Present	Past	Bar. corr., mb.	Characteristic	Amt. change	Dry bulb, °F.	Wet bulb, °F.	Sea water, °F.	Total amount	Amount low	Type low	Height low	Type middle	Type high	Direction	Period	Height
3/29	21.0°N	157.6°W	0600	98	06	25	01	2	1019.0	3	1.0	72.5	66.3	74.3	6	2	1	5	8	1	05	3	4
3/29	20.3°N	157.3°W	1200	98	06	22	00	2	1019.3	7	1.0	73.0	67.2	74.2	4	4	X	X	X	X	XX	X	X
3/29	19.7°N	156.5°W	1800	98	06	17	01	1	1018.0	3	1.0	74.1	67.8	75.3	2	1	1	4	8	1	04	2	4
3/30	19.0°N	156.0°W	0000	98	17	12	15	1	1015.9	7	2.0	78.0	68.4	76.2	6	4	4	5	0	5	14	2	1
3/30	18.5°N	155.4°W	0600	97	02	28	02	2	1018.0	2	2.0	73.8	68.0	74.4	8	8	5	4	X	X	08	3	4
3/30	18.0°N	154.9°W	1200	97	06	21	01	1	1017.6	3	1.4	73.0	68.3	74.6	2	2	1	5	0	0	06	2	3
3/30	17.4°N	154.3°W	1800	99	06	20	01	1	1018.0	1	2.0	74.5	69.8	75.7	3	3	4	4	0	0	06	2	3
3/31	16.8°N	153.6°W	0000	97	07	20	15	1	1015.6	7	2.4	76.0	70.8	75.5	3	3	9	5	0	2	06	2	4
3/31	16.2°N	153.1°W	0600	97	07	24	18	6	1016.6	3	1.4	71.8	70.2	75.3	8	8	4	4	X	X	06	3	5
3/31	15.6°N	152.5°W	1200	97	08	28	15	8	1016.6	8	1.4	73.7	69.7	75.6	6	3	9	4	0	6	04	4	5
3/31	15.3°N	152.0°W	1800	98	06	26	02	1	1017.3	1	2.0	75.1	69.7	76.2	2	1	1	4	4	X	04	4	5
4/1	14.7°N	151.6°W	0000	97	06	27	15	1	1014.9	7	2.7	77.0	71.5	76.7	7	2	9	5	0	0	06	3	6
4/1	14.2°N	151.0°W	0600	97	07	27	02	1	1015.6	3	1.4	74.5	71.3	77.1	4	4	2	5	0	0	07	3	5
4/1	13.8°N	150.5°W	1200	97	07	24	01	0	1014.9	6	1.7	75.2	70.5	77.4	3	3	2	5	0	0	08	3	7
4/1	13.2°N	149.9°W	1800	98	07	26	15	1	1015.2	1	2.0	76.8	72.0	77.4	6	2	1	4	7	1	07	4	5
4/2	12.7°N	149.3°W	0000	97	07	25	16	8	1011.5	8	3.4	77.5	73.5	79.0	6	5	9	4	6	0	08	3	5
4/2	12.2°N	148.8°W	0600	97	08	24	18	8	1013.5	2	2.4	77.0	73.1	79.2	7	7	5	4	0	0	08	3	5
4/2	11.7°N	148.3°W	1200	97	07	27	02	2	1012.5	7	2.4	77.2	73.0	79.6	6	2	2	4	0	9	08	3	4
4/2	11.2°N	147.7°W	1800	98	07	24	03	1	1012.9	2	2.0	78.1	72.2	79.0	2	1	2	4	4	9	07	4	4
4/3	10.6°N	147.1°W	0000	97	06	24	01	0	1011.5	7	3.1	79.0	73.5	80.1	2	2	2	5	0	1	06	3	4
4/3	10.1°N	146.5°W	0600	98	07	24	03	0	1013.2	2	2.0	78.1	73.2	78.5	3	3	2	5	0	0	07	3	4
4/3	09.7°N	145.9°W	1200	97	05	25	03	1	1011.9	7	2.2	78.0	73.1	78.5	7	1	1	5	3	0	09	4	3
4/3	09.2°N	145.3°W	1800	97	05	24	01	1	1012.5	1	2.0	78.8	74.1	79.0	6	4	4	4	0	5	05	4	4
4/4	08.6°N	144.7°W	0000	97	05	25	14	8	1009.5	7	2.7	79.5	74.0	80.0	7	7	4	4	0	6	06	5	5
4/4	08.1°N	144.2°W	0600	97	05	20	02	2	1012.5	2	2.7	78.2	75.2	80.4	8	8	4	4	X	X	06	4	5
4/4	07.6°N	143.6°W	1200	97	06	26	02	2	1009.5	7	2.7	78.8	75.2	80.8	8	8	5	4	X	X	04	3	6
4/4	07.1°N	143.0°W	1800	97	05	24	02	2	1011.5	2	2.0	81.6	76.6	81.6	4	3	4	4	8	9	07	3	5
4/5	06.6°N	142.6°W	0000	96	06	25	25	8	1008.1	7	3.4	81.0	78.0	81.8	8	8	7	4	X	X	06	3	6
4/5	06.1°N	141.7°W	0600	96	04	16	52	5	1009.5	2	2.0	80.0	77.5	82.0	8	8	4	4	X	X	06	3	5
4/5	05.7°N	141.0°W	1200	96	06	18	50	5	1007.1	7	2.5	80.3	78.0	81.7	8	8	7	4	X	X	07	2	4
4/5	05.3°N	140.3°W	1800	97	11	13	51	2	1009.8	1	2.7	81.2	78.0	81.5	8	7	2	4	3	X	08	3	3
4/6	04.6°N	140.0°W	0000	97	01	20	20	2	1007.1	7	2.4	81.5	78.0	83.8	7	7	2	5	0	0	08	3	2
4/6	04.0°N	140.0°W	0600	97	23	02	01	1	1009.5	2	2.0	80.9	77.0	82.2	3	3	4	5	X	X	09	2	1
4/6	03.7°N	140.0°W	1200	97	31	07	03	2	1008.5	7	2.0	80.7	76.5	81.7	7	7	4	4	X	X	03	2	2
4/7	02.8°N	140.0°W	0000	97	10	10	01	1	1006.4	7	2.7	82.7	77.5	83.0	3	3	3	5	0	0	03	3	2
4/7	02.1°N	140.0°W	0500	97	11	10	01	8	1007.8	2	1.7	82.2	77.0	82.6	3	X	X	X	X	X	13	2	2
4/7	01.8°N	140.1°W	1200	97	12	09	00	0	1007.1	6	1.4	81.9	77.5	82.0	3	3	3	4	0	0	15	2	2
4/7	01.0°N	140.0°W	1700	97	12	14	02	8	1008.8	2	2.0	82.0	77.2	81.1	3	2	3	4	6	0	12	2	2
4/8	00.8°N	140.0°W	0000	97	13	11	01	0	1006.4	7	1.7	82.0	77.4	81.8	2	2	1	5	0	0	13	2	2
4/8	00.0°N	140.1°W	0600	97	13	12	00	0	1009.8	2	2.7	80.5	77.0	80.9	1	X	X	X	X	X	13	2	2

[1/] All columns in USWB 1210-F are not included here. Those deleted are:

Column	2	Day of week	Column	23	Course of ship
"	3	Octant	"	24	Speed of ship
"	13	Barometer as read	"	31	Diff. sea-air, °F.
"	14	Barometer as corrected	"	32	Dew point, °F.
"	17	Air temperature, °F.			

Table 9.--Weather observations (USWB 1210-F), Hugh M. Smith cruise 45 (cont'd)

Date, 1958	Latitude	Longitude	Time, GCT	Visibility	Wind		Weather		Pressure			Temperature			Clouds						Waves		
					Direction	Speed, kt.	Present	Past	Bar. corr., mb.	Characteristic	Amt. change	Dry bulb, °F.	Wet bulb, °F.	Sea water, °F.	Total amount	Amount low	Type low	Height low	Type middle	Type high	Direction	Period	Height
4/8	00.0°	140.1°W	1200	97	07	12	02	0	1008.5	6	2.0	81.6	77.1	80.7	1	1	1	4	X	X	07	2	2
4/9	00.9°S	140.0°W	0000	97	10	10	03	0	1007.1	7	2.0	82.0	77.3	81.7	3	2	3	4	0	0	13	2	1
4/9	01.2°S	140.0°W	0600	97	12	12	00	1	1009.5	2	1.4	82.0	76.6	81.6	7	X	X	X	X	X	14	2	2
4/9	02.0°S	140.0°W	1200	97	12	13	01	1	1007.8	7	1.4	81.5	77.5	81.6	3	3	3	4	X	X	13	2	2
4/9	02.2°S	140.0°W	1800	97	13	12	02	8	1010.8	2	1.4	83.2	78.8	82.0	3	2	2	4	6	0	14	2	2
4/10	03.0°S	140.0°W	0000	97	11	12	01	0	1007.1	7	2.4	84.0	78.0	82.3	1	1	1	5	0	0	14	2	2
4/10	03.0°S	140.0°W	0700	97	16	12	00	0	1010.2	2	2.7	82.2	77.5	82.1	1	X	X	X	X	X	14	2	2
4/10	03.8°S	140.1°W	1200	97	09	08	02	0	1009.1	7	1.4	82.2	77.0	82.3	1	1	1	4	X	X	14	2	2
4/10	04.0°S	140.0°W	1800	97	06	12	01	1	1011.5	0	1.4	84.6	78.1	82.5	2	2	1	4	0	0	07	2	2
4/11	03.4°S	140.0°W	0000	97	09	09	02	0	1007.5	7	2.4	84.8	77.8	83.0	1	1	1	5	0	0	12	2	2
4/11	02.4°S	140.0°W	0600	97	06	12	00	0	1010.8	1	2.7	81.6	76.2	81.8	1	X	X	X	X	X	12	2	2
4/11	01.5°S	140.0°W	1200	97	08	08	00	0	1009.1	6	1.0	81.0	76.5	81.5	1	1	1	X	X	X	15	2	2
4/11	00.6°S	140.0°W	1800	97	11	08	02	0	1011.5	1	1.4	82.0	76.4	80.9	2	2	1	4	0	0	04	2	2
4/12	00.0°	140.0°W	0000	97	11	08	02	0	1007.8	6	2.0	81.2	77.0	81.4	1	1	1	4	0	8	09	2	2
4/12	00.0°	140.0°W	0600	97	11	12	02	0	1010.8	1	2.7	80.2	75.5	80.6	1	1	X	X	X	X	14	2	2
4/12	00.0°	140.0°W	1200	97	12	08	00	0	1009.1	6	1.4	80.3	75.6	80.5	1	1	1	4	X	X	14	2	2
4/12	00.0°	140.0°W	1900	97	10	08	02	0	1012.5	1	1.4	81.9	76.4	80.6	2	1	1	4	6	0	17	2	2
4/13	00.0°	140.0°W	0000	97	14	10	02	0	1008.5	7	1.7	81.2	76.2	81.2	2	1	1	5	6	0	10	2	2
4/13	00.0°	140.0°W	0600	97	11	10	00	0	1010.5	2	2.0	80.2	75.2	80.6	1	X	X	X	X	X	12	2	2
4/13	00.0°	140.0°W	1200	97	09	10	00	0	1009.5	6	1.4	81.0	76.0	80.5	1	1	1	4	X	X	10	2	2
4/13	00.0°	140.0°W	1800	97	18	10	02	0	1013.2	1	2.0	81.8	76.3	80.5	1	1	1	4	0	0	14	2	2
4/14	00.0°	140.0°W	0000	97	10	06	02	0	1009.1	7	2.0	81.7	75.0	82.8	1	1	1	5	0	0	14	2	1
4/14	00.0°	140.0°W	0600	97	19	08	02	0	1011.9	2	2.0	80.5	75.2	81.1	1	1	X	X	X	X	13	2	1
4/14	00.0°	140.0°W	1200	97	10	08	02	0	1009.8	6	2.4	80.0	76.5	80.8	1	1	1	4	X	X	14	2	1
4/14	00.0°	140.0°W	1800	97	11	08	02	0	1012.9	1	1.7	81.0	76.0	80.8	1	1	1	4	0	0	16	2	1
4/15	00.0°	140.0°W	0000	97	10	07	02	0	1009.1	7	2.0	82.1	75.8	82.1	1	1	1	5	0	0	14	2	1
4/15	00.0°	140.0°W	0600	97	11	12	00	0	1010.5	2	1.7	80.0	76.2	80.9	1	1	X	X	X	X	17	2	1
4/15	00.0°	140.0°W	1200	97	09	10	00	0	1009.1	6	1.7	81.5	76.5	80.6	1	1	1	4	X	X	17	2	1
4/15	00.0°	140.0°W	1800	97	14	14	02	0	1010.8	2	2.0	81.8	75.9	80.4	1	1	1	4	0	0	19	2	2
4/16	00.0°	140.0°W	0000	97	11	15	03	0	1007.5	7	2.7	81.5	75.5	81.0	3	2	8	4	0	9	17	2	2
4/16	00.0°	140.0°W	1200	97	09	12	00	0	1008.5	7	1.7	80.0	75.8	80.3	2	2	8	4	X	X	11	2	2
4/16	00.0°	140.0°W	1800	97	10	12	01	1	1011.2	2	2.7	82.1	77.1	80.4	3	2	1	4	0	1	11	2	2
4/17	00.0°	140.0°W	0000	97	10	10	01	0	1007.8	7	2.0	81.8	76.0	81.2	2	2	1	4	0	1	10	2	2
4/17	00.0°	140.0°W	0600	97	10	10	00	0	1011.2	2	2.0	80.5	76.3	80.6	2	X	X	X	X	X	10	2	2
4/17	00.0°	140.0°W	1200	97	12	10	00	0	1009.1	7	2.0	81.5	76.5	80.4	2	2	1	4	X	X	13	2	2
4/17	00.0°	140.0°W	1800	97	12	12	02	1	1012.9	1	3.4	81.2	76.6	80.3	7	6	4	4	0	1	13	2	2
4/18	00.0°	140.0°W	0000	97	13	10	03	2	1009.1	7	2.7	81.8	76.7	81.3	7	6	4	5	0	0	14	2	2
4/18	00.0°	140.0°W	0600	97	13	08	00	1	1010.8	2	2.0	80.4	76.7	80.9	2	X	X	X	X	X	14	2	2
4/18	00.4°N	140.0°W	1200	97	12	07	03	1	1009.8	7	1.7	81.5	77.4	80.6	8	X	X	X	X	X	13	2	2
4/18	00.9°N	140.0°W	1800	97	14	10	01	2	1012.5	0	2.4	81.0	76.8	81.2	6	6	8	4	0	0	13	2	2
4/19	01.9°N	140.0°W	0000	97	15	09	01	1	1008.8	7	2.7	83.0	77.1	83.6	3	2	2	4	6	0	14	2	1
4/19	02.0°N	140.0°W	0600	97	10	10	00	8	1011.9	2	2.0	82.0	77.0	83.0	4	X	X	X	X	X	13	2	1
4/19	02.9°N	140.0°W	1200	97	08	10	03	1	1009.5	7	2.0	82.0	77.8	83.1	4	3	2	4	X	X	13	2	1
4/19	03.4°N	140.0°W	1800	97	06	10	15	8	1012.5	2	2.0	82.3	77.1	82.9	7	5	4	4	3	0	07	2	1
4/20	02.6°N	139.9°W	0000	97	13	03	15	8	1007.8	7	2.7	84.0	77.5	85.2	6	4	8	4	4	1	09	2	1
4/20	02.0°N	140.0°W	0600	97	11	06	01	8	1010.2	2	2.0	82.5	77.5	83.5	3	2	8	4	X	X	13	2	1
4/20	02.0°N	140.0°W	1200	97	11	12	01	0	1009.1	6	1.7	82.5	77.8	83.0	1	1	1	4	X	X	13	2	1
4/20	02.0°N	140.0°W	1800	97	18	06	15	1	1012.5	2	2.9	83.8	78.1	82.8	7	5	2	4	3	0	17	2	1
4/21	01.4°N	140.0°W	0000	97	14	12	01	1	1009.1	7	2.7	82.7	77.0	82.5	4	3	1	4	0	1	14	2	1
4/21	00.9°N	140.0°W	0600	97	14	08	01	1	1012.5	2	2.4	81.5	78.0	82.0	1	1	1	4	0	0	14	2	1

Table 9.--Weather observations (USWB 1210-F), Hugh M. Smith cruise 45 (cont'd)

Date, 1958	Latitude	Longitude	Time, GCT	Visibility	Wind		Weather		Pressure			Temperature			Clouds						Waves		
					Direction	Speed, kt.	Present	Past	Bar. corr., mb.	Characteristic	Amt. change	Dry bulb, °F.	Wet bulb, °F.	Sea water, °F.	Total amount	Amount low	Type low	Height low	Type middle	Type high	Direction	Period	Height
4/21	00.8°N	140.0°W	1200	97	12	12	01	0	1010.5	7	2.0	81.1	77.1	81.4	2	2	1	4	X	X	14	2	1
4/21	00.3°N	139.9°W	1800	97	12	13	01	1	1013.2	2	2.7	82.0	77.3	80.9	4	4	2	4	0	0	14	2	1
4/22	00.5°S	140.0°W	0000	97	13	12	02	0	1009.8	7	1.7	82.0	77.6	81.8	1	1	1	4	0	0	14	2	1
4/22	01.0°S	140.0°W	0600	97	14	12	02	0	1012.5	2	2.7	81.5	76.6	81.5	1	1	1	4	0	0	14	2	1
4/22	01.5°S	140.1°W	1200	97	12	10	02	0	1010.2	7	2.4	81.5	76.5	81.6	1	1	1	4	0	0	14	2	1
4/22	02.1°S	140.2°W	1800	97	11	06	01	0	1012.2	1	1.0	83.6	77.1	82.3	1	1	1	4	0	1	14	2	1
4/23	02.5°S	140.0°W	0000	97	07	03	15	8	1008.5	7	2.0	83.5	77.8	84.1	3	1	3	4	0	8	14	2	1
4/23	03.1°S	140.0°W	0600	97	06	10	02	8	1010.5	2	1.4	82.2	77.9	82.6	2	2	1	4	0	0	12	2	1
4/23	03.2°S	139.9°W	1200	97	03	12	13	0	1008.5	8	1.7	81.8	78.0	82.4	2	1	3	4	X	X	12	2	1
4/23	02.5°S	140.0°W	1800	97	03	08	03	1	1011.2	2	2.0	83.0	77.3	82.2	5	4	4	4	0	1	08	2	1
4/24	02.1°S	140.3°W	0000	97	06	06	02	1	1007.8	7	2.4	84.8	77.0	83.8	2	1	3	4	6	1	16	2	1
4/24	01.5°S	140.0°W	0600	97	06	06	02	8	1009.8	2	1.4	82.9	77.1	82.3	1	1	1	4	0	0	16	2	1
4/24	01.0°S	140.0°W	1200	97	15	06	02	0	1007.5	7	1.4	82.0	77.1	82.0	1	1	X	X	X	X	14	2	1
4/24	00.5°S	140.0°W	1800	97	10	08	02	0	1009.5	2	2.0	82.8	77.8	81.2	3	2	1	4	0	1	11	2	1
4/25	00.0°	140.0°W	0000	97	12	12	02	0	1007.1	7	1.7	83.0	76.6	81.5	1	1	1	4	0	0	14	2	1
4/25	00.0°	140.0°W	0600	97	11	12	03	0	1009.1	2	2.0	81.5	76.7	81.2	2	2	1	4	0	0	14	2	1
4/25	00.1°N	140.1°W	1200	97	09	10	02	0	1007.1	7	1.7	81.5	76.5	81.0	1	1	1	4	X	X	12	2	1
4/25	00.1°N	140.1°W	1800	97	10	16	03	0	1009.8	2	2.0	82.3	76.2	81.0	2	2	1	4	0	0	11	2	1
4/26	00.2°N	140.2°W	0000	97	10	12	02	0	1006.1	7	2.7	82.5	77.0	81.5	1	1	1	4	0	0	11	2	1
4/26	00.2°N	140.2°W	0600	97	09	10	01	0	1009.8	2	2.0	81.2	77.2	81.0	1	1	1	4	0	0	13	2	1
4/26	00.0°	140.0°W	1200	97	09	12	02	0	1007.1	6	1.4	81.0	77.5	81.0	1	1	1	4	X	X	13	2	1
4/26	00.0°	140.0°W	1800	97	11	12	02	0	1009.8	2	1.7	82.7	78.0	81.0	1	1	1	4	0	0	12	2	1
4/27	00.0°	140.0°W	0000	97	11	08	15	8	1007.1	7	2.0	82.5	78.0	81.5	2	1	3	4	6	0	12	2	1
4/27	00.0°	140.0°W	0600	97	08	08	02	8	1009.8	2	2.0	80.0	76.4	81.0	2	2	4	4	0	0	10	2	1
4/27	00.0°	140.1°W	1200	97	11	10	02	1	1008.5	7	1.7	81.5	76.8	81.0	7	7	4	4	X	X	11	2	1
4/27	00.1°N	140.1°W	1800	97	13	12	02	8	1010.5	2	1.7	80.1	76.8	80.9	4	3	4	3	0	1	14	2	1
4/28	00.0°	140.0°W	0000	97	10	14	81	1	1007.8	7	2.0	82.0	78.0	81.3	8	8	4	3	X	X	14	2	1
4/28	00.7°S	140.6°W	0600	97	12	09	03	2	1009.8	1	2.0	81.1	77.0	81.2	7	7	4	4	0	0	12	2	1
4/28	01.7°S	141.2°W	1200	97	13	06	01	1	1007.8	7	1.9	81.5	77.5	82.0	1	1	1	4	X	X	12	2	1
4/28	02.5°S	141.7°W	1800	97	14	12	03	1	1009.5	2	2.0	83.2	77.9	83.1	3	3	1	4	0	0	13	2	1
4/29	03.4°S	142.3°W	0000	93	15	16	02	0	1007.1	7	2.7	82.9	78.0	83.1	3	1	3	4	0	0	15	2	2
4/29	04.3°S	142.8°W	0600	97	13	18	03	1	1008.8	2	2.7	82.8	78.5	82.9	5	5	3	4	0	0	15	2	2
4/29	05.1°S	143.3°W	1200	97	14	14	02	1	1008.1	7	1.0	83.0	78.0	83.2	2	2	1	4	0	0	XX	2	2
4/29	06.0°S	143.6°W	1800	97	10	16	15	1	1009.8	2	1.4	83.0	74.9	83.8	5	3	2	4	6	1	11	2	2
4/30	06.8°S	144.3°W	0000	97	12	18	15	1	1007.1	7	2.0	84.5	78.0	84.2	2	2	3	4	0	0	14	2	2
4/30	07.6°S	144.7°W	0600	97	10	20	01	0	1009.8	2	2.7	84.1	77.0	84.6	1	1	1	3	0	0	15	2	2
4/30	08.8°S	145.2°W	1300	97	10	16	80	1	1008.5	6	1.4	84.0	78.0	84.6	7	4	9	3	X	X	14	2	2
4/30	09.5°S	145.5°W	1800	97	11	18	01	1	1011.2	2	1.7	85.0	78.0	84.8	2	1	2	4	0	6	11	2	2
5/1	10.3°S	146.0°W	0000	97	10	14	02	0	1007.8	7	1.7	84.0	78.1	84.6	1	1	2	4	0	0	12	2	2
5/1	11.2°S	146.3°W	0600	97	10	14	02	0	1009.8	2	2.0	84.0	78.0	84.3	1	1	1	4	X	X	12	2	2
5/1	12.1°S	146.7°W	1200	97	11	14	02	0	1009.8	7	1.4	83.2	76.5	84.0	1	1	1	4	0	0	13	2	2
5/1	12.9°S	147.3°W	1800	97	09	14	02	0	1011.2	2	2.0	83.5	78.5	83.9	1	1	3	4	0	0	12	2	2
5/2	13.5°S	148.0°W	0000	97	12	16	02	0	1009.5	7	2.0	84.1	78.0	84.0	2	2	3	4	0	0	13	2	2
5/2	14.3°S	148.7°W	0600	97	12	12	02	0	1009.8	3	1.7	83.5	77.5	84.2	1	1	1	4	0	0	09	2	2
5/2	15.3°S	149.1°W	1200	97	14	14	02	0	1010.2	7	1.4	82.6	76.8	83.7	1	1	1	4	0	0	10	2	2
5/2	16.5°S	149.2°W	1800	97	09	14	02	0	1011.9	2	2.0	83.5	77.6	83.8	1	1	3	4	0	0	06	2	1
5/3	17.1°S	149.5°W	0000	97	10	16	02	0	1010.2	7	1.7	83.0	76.8	83.9	3	2	3	4	0	1	09	2	1
5/7	17.6°S	149.0°W	1800	97	04	23	02	5	1009.5	0	0.0	79.4	75.6	82.8	8	8	7	4	X	X	04	2	3
5/8	17.0°S	148.4°W	0000	97	01	18	02	2	1007.5	6	1.4	82.5	74.9	83.1	7	7	7	4	0	0	01	2	3
5/8	16.3°S	147.9°W	0600	97	01	23	80	2	1010.8	2	2.0	83.0	76.3	83.1	8	8	5	4	X	X	01	2	3

Table 9.--Weather observations (USWB 1210-F), Hugh M. Smith cruise 45 (cont'd)

Date, 1958	Latitude	Longitude	Time, GCT	Visibility	Wind		Weather		Pressure			Temperature			Clouds						Waves		
					Direction	Speed, kt.	Present	Past	Bar. corr., mb.	Characteristic	Amt. change	Dry bulb, °F.	Wet bulb, °F.	Sea water, °F.	Total amount	Amount low	Type low	Height low	Type middle	Type high	Direction	Period	Height
5/8	16.0°S	147.6°W	1200	97	02	16	01	8	1009.5	8	1.4	82.5	74.8	83.1	7	1	1	4	4	6	01	2	1
5/8	15.7°S	147.4°W	1800	97	02	18	01	2	1010.5	1	1.7	83.2	76.8	83.4	6	2	2	4	3	0	02	2	2
5/9	15.0°S	146.8°W	0000	97	02	12	01	1	1008.8	7	1.4	83.8	75.5	83.7	2	2	0	X	3	0	03	2	2
5/9	14.2°S	146.3°W	0600	98	05	12	01	1	1009.8	2	1.4	83.0	76.3	83.3	2	1	1	4	8	0	04	2	2
5/9	13.7°S	145.6°W	1200	97	06	15	02	0	1008.5	7	1.0	83.0	76.3	83.6	2	1	1	4	6	0	05	2	2
5/9	13.1°S	144.9°W	1800	97	05	14	02	0	1011.2	1	2.0	84.5	77.2	83.2	1	1	2	4	0	0	06	2	2
5/10	12.5°S	144.2°W	0000	97	07	10	02	0	1008.5	7	2.0	83.9	76.0	84.0	1	1	2	4	0	0	06	2	2
5/10	11.9°S	143.5°W	0600	98	10	14	01	1	1010.2	2	1.4	83.3	78.2	84.5	1	1	1	4	0	0	06	3	2
5/10	11.4°S	142.9°W	1200	97	11	14	00	0	1009.1	6	1.0	82.5	77.0	83.0	1	1	1	4	0	0	09	2	2
5/10	10.8°S	142.3°W	1800	97	10	18	02	0	1011.5	3	2.4	83.7	75.2	83.2	1	1	2	4	0	0	10	2	3
5/11	10.3°S	141.7°W	0000	97	11	18	03	0	1007.1	7	2.7	84.5	76.2	84.0	2	2	1	4	0	0	10	2	3
5/11	09.8°S	141.0°W	0600	98	11	17	01	1	1009.1	2	1.7	83.0	78.0	83.8	2	2	2	4	0	0	10	3	3
5/11	09.3°S	140.3°W	1200	97	07	12	02	0	1007.5	6	1.0	80.0	76.8	83.0	1	1	1	4	0	0	08	3	3
5/15	09.2°S	139.3°W	1800	97	09	12	03	0	1011.9	2	2.0	82.9	76.6	83.1	2	2	1	4	0	0	09	3	2
5/16	09.1°S	138.7°W	0000	97	13	14	02	0	1007.5	6	1.4	82.8	77.0	83.1	2	1	1	4	0	5	10	3	2
5/16	09.1°S	138.1°W	0600	98	11	16	02	0	1010.2	2	1.5	82.2	76.0	82.6	1	1	1	4	0	0	12	3	2
5/16	09.2°S	137.4°W	1200	97	10	10	02	0	1008.8	7	0.7	81.6	75.7	82.4	1	1	1	4	0	0	10	2	2
5/16	09.2°S	136.8°W	1800	97	11	13	02	0	1011.9	1	2.0	82.2	76.2	82.8	2	1	2	4	1	0	11	2	2
5/17	09.2°S	136.1°W	0000	98	10	12	03	0	1009.5	7	2.0	82.5	75.2	82.7	3	1	1	5	8	8	09	3	3
5/17	09.2°S	136.1°W	0600	98	09	14	02	0	1011.5	2	2.0	82.1	75.0	82.5	2	1	1	X	X	X	09	3	2
5/17	09.2°S	137.0°W	1200	98	08	10	02	0	1010.5	6	0.9	81.2	75.5	82.6	1	1	1	4	0	0	09	3	2
5/17	09.2°S	137.7°W	1800	97	08	14	03	0	1012.2	1	1.4	82.9	74.9	82.8	3	1	1	4	0	5	09	2	1
5/18	09.2°S	138.5°W	0000	98	08	08	02	0	1008.8	7	2.7	XXX	76.8	83.2	2	2	1	5	0	2	08	2	2
5/18	09.2°S	139.1°W	0600	99	13	12	01	0	1010.8	2	2.0	82.2	75.5	82.8	1	1	1	4	0	0	10	2	1
5/19	09.2°S	140.1°W	1800	99	10	18	02	0	1013.2	2	1.4	82.9	75.3	83.1	2	2	4	4	0	0	08	1	1
5/20	09.2°S	140.7°W	0000	98	10	10	02	0	1009.8	7	2.0	83.8	76.2	83.6	2	2	2	5	0	1	10	2	2
5/20	09.2°S	141.3°W	0600	98	12	17	02	0	1011.5	2	1.4	83.2	77.0	83.2	2	2	X	X	X	X	08	2	2
5/20	09.2°S	142.0°W	1200	98	10	14	02	0	1010.5	7	1.4	82.4	75.3	83.8	2	2	1	4	0	0	10	2	2
5/20	09.3°S	142.6°W	1800	97	07	12	01	1	1012.9	1	1.0	83.8	76.3	84.0	1	1	2	4	4	0	10	2	2
5/21	09.2°S	143.2°W	0000	98	07	11	02	0	1009.1	7	2.4	XXX	77.3	84.3	1	1	2	5	0	9	07	2	2
5/21	09.2°S	143.1°W	0600	97	10	12	03	0	1010.5	2	1.7	83.6	77.2	84.0	3	3	X	X	X	X	09	2	2
5/21	09.2°S	142.4°W	1200	97	12	14	64	1	1009.5	7	1.4	81.0	76.0	83.0	4	4	X	X	X	X	09	2	2
5/21	09.2°S	141.8°W	1800	97	08	10	01	0	1010.8	2	1.4	83.3	75.8	83.8	1	1	2	4	0	0	09	2	2
5/22	09.2°S	141.1°W	0000	97	10	12	91	8	1007.5	7	2.4	82.8	77.7	83.5	6	6	9	4	0	0	10	2	2
5/22	09.2°S	140.6°W	0600	98	10	20	81	8	1008.1	3	1.7	80.3	76.5	82.8	4	4	5	4	0	0	09	2	2
5/22	08.9°S	140.2°W	1800	98	12	18	03	0	1009.1	1	1.4	83.1	75.8	83.1	2	1	2	4	0	5	13	2	2
5/23	08.8°S	139.7°W	1800	98	09	12	03	1	1010.8	1	1.4	82.7	74.3	82.8	5	2	2	4	0	2	09	2	2
5/24	08.1°S	139.7°W	0000	98	09	14	02	1	1007.8	7	1.7	82.7	75.5	83.2	3	1	1	5	0	8	08	2	3
5/24	07.6°S	139.7°W	0600	98	06	12	01	1	1009.1	2	2.2	81.7	75.3	82.7	1	1	1	4	0	0	08	2	2
5/24	06.9°S	139.7°W	1200	98	07	11	02	0	1008.8	6	0.7	80.5	75.5	82.3	1	1	X	X	X	X	08	2	2
5/24	06.3°S	139.6°W	1800	97	09	05	01	1	1010.8	2	1.4	83.3	75.3	82.4	4	1	1	4	0	6	08	3	1
5/25	05.7°S	139.6°W	0000	97	07	06	02	0	1007.5	7	2.0	82.3	75.3	83.8	1	1	2	5	0	0	07	3	2
5/25	05.6°S	139.6°W	0600	97	10	07	02	0	1009.8	2	2.0	81.7	74.2	82.7	1	1	2	4	0	0	10	3	1
5/25	06.4°S	139.6°W	1200	97	00	00	03	0	1009.1	7	0.7	81.0	74.8	82.7	2	1	1	4	0	1	10	3	0
5/25	07.1°S	139.7°W	1800	96	08	15	15	6	1012.2	1	2.0	79.8	75.2	82.4	7	7	7	4	0	0	09	3	2
5/26	07.7°S	139.7°W	0000	97	23	07	15	8	1008.8	7	2.4	80.9	75.3	83.2	7	7	9	8	0	0	10	3	2
5/26	08.4°S	139.7°W	0600	97	12	07	02	1	1011.2	1	2.0	81.6	74.1	82.9	2	2	2	X	X	X	09	3	1
5/27	09.6°S	139.7°W	1800	97	08	22	03	0	1012.2	2	1.7	81.9	73.3	82.9	2	1	2	4	0	2	09	2	2
5/28	10.3°S	139.7°W	0000	97	05	13	03	1	1009.1	7	2.0	82.2	74.8	83.2	5	5	4	4	0	0	07	2	2
5/28	10.9°S	139.6°W	0600	97	05	16	01	1	1011.2	2	1.4	82.0	75.8	82.7	1	1	1	4	0	0	07	2	2

Table 9.--Weather observations (USWB 1210-F), Hugh M. Smith cruise 45 (cont'd)

Date, 1958	Latitude	Longitude	Time, GCT	Visibility	Wind		Weather		Pressure			Temperature			Clouds						Waves		
					Direction	Speed, kt.	Present	Past	Bar. corr., mb.	Characteristic	Amt. change	Dry bulb, °F.	Wet bulb, °F.	Sea water, °F.	Total amount	Amount low	Type low	Height low	Type middle	Type high	Direction	Period	Height
5/28	11.5°S	139.7°W	1200	97	06	12	02	0	1010.5	7	0.7	81.7	76.8	82.8	1	1	1	4	0	0	05	3	1
5/28	12.1°S	139.7°W	1800	97	02	13	02	0	1012.9	2	2.4	82.8	76.2	82.7	2	2	2	4	0	0	01	2	2
5/29	12.6°S	139.7°W	0000	98	02	16	02	1	1009.8	7	2.4	83.8	77.2	82.9	6	2	2	5	0	4	02	2	2
5/29	12.7°S	139.7°W	0600	98	35	10	02	1	1013.2	1	2.0	82.5	76.0	82.5	5	4	2	6	X	X	02	2	2
5/29	12.0°S	139.7°W	1200	98	02	15	02	2	1011.2	7	1.4	81.2	75.6	82.8	4	4	4	4	0	0	02	2	2
5/29	11.3°S	139.7°W	1800	97	02	09	02	1	1013.2	1	1.7	82.6	75.7	82.8	2	2	2	4	0	0	02	2	2
5/30	10.7°S	139.7°W	0000	98	01	08	02	0	1009.5	7	2.7	82.8	74.8	83.4	3	2	2	5	0	1	02	2	2
5/30	10.1°S	139.6°W	0600	98	02	03	02	0	1011.9	3	1.4	82.2	74.6	83.3	3	2	2	5	0	5	02	2	1
5/30	09.4°S	139.6°W	1200	98	05	11	02	0	1011.2	7	0.7	81.0	75.2	82.6	4	4	2	5	0	0	02	2	1
6/1	08.8°S	140.5°W	1800	98	03	19	02	2	1011.9	2	2.0	82.6	75.2	83.1	6	6	5	4	0	0	06	2	2
6/2	08.2°S	140.7°W	0000	98	05	12	01	1	1008.5	7	2.4	82.6	73.2	83.5	1	1	2	4	0	1	07	2	2
6/2	07.9°S	140.7°W	0600	98	06	13	02	0	1010.8	2	2.4	81.7	74.3	82.9	1	1	1	4	0	0	06	2	2
6/2	07.9°S	140.7°W	1200	98	05	10	16	0	1009.8	8	1.4	81.5	74.8	83.3	1	1	9	4	0	0	06	2	0
6/2	07.9°S	140.3°W	1800	98	05	16	02	0	1011.5	3	2.0	82.8	73.8	83.0	1	1	2	4	0	0	05	2	1
6/3	07.9°S	139.9°W	0000	98	08	10	01	0	1008.5	7	2.0	83.0	75.3	83.3	1	1	1	5	0	0	08	2	1
6/3	08.1°S	139.6°W	0600	96	08	14	83	1	1010.5	2	1.7	80.5	75.5	83.0	8	8	7	5	X	X	08	2	1
6/3	08.1°S	139.6°W	1200	97	09	17	01	1	1009.5	8	1.0	81.3	73.8	82.8	2	2	2	4	0	0	09	2	2
6/3	08.4°S	139.4°W	1800	97	08	16	01	0	1012.2	2	2.0	83.1	74.0	82.8	1	1	2	4	0	0	09	2	2
6/4	08.9°S	139.3°W	0000	98	09	11	02	0	1009.1	6	2.0	82.3	75.3	82.8	2	2	2	5	0	0	09	2	2
6/5	08.9°S	139.9°W	1200	98	08	20	01	1	1010.5	8	1.4	81.0	75.0	82.6	2	2	2	4	0	0	08	2	2
6/5	09.3°S	139.2°W	1800	98	10	22	01	1	1011.5	2	1.4	82.2	75.8	82.6	1	1	2	4	0	0	10	2	3
6/6	09.6°S	138.8°W	0000	98	09	18	02	0	1008.5	7	2.4	83.0	76.8	82.8	1	1	2	5	0	0	09	3	3
6/6	09.9°S	139.0°W	1800	98	10	14	00	0	1012.2	2	1.4	82.3	75.8	82.8	3	2	2	4	0	5	10	2	3
6/7	09.7°S	139.1°W	0000	98	07	20	02	1	1008.1	7	2.0	83.5	76.0	82.8	5	3	2	5	0	1	06	2	3
6/7	10.2°S	138.8°W	1800	98	10	17	15	1	1013.2	2	2.4	82.3	75.3	82.8	3	3	2	5	0	0	09	3	3
6/8	10.6°S	138.7°W	0000	98	08	09	03	1	1010.5	7	2.0	82.9	75.8	82.9	2	2	2	5	0	0	08	3	3
6/8	Omoa, Fatu Hiva		0600	97	11	08	02	0	1012.2	2	1.4	75.9	72.8	82.7	1	1	1	5	0	0	27	2	0
6/8	10.1°S	139.1°W	1800	98	07	09	02	0	1012.9	2	1.4	81.9	74.6	82.9	2	1	2	5	0	5	09	2	0
6/9	09.6°S	139.8°W	0000	98	09	12	02	0	1009.8	6	2.0	82.7	75.3	83.0	1	1	2	5	0	5	09	2	1
6/9	09.6°S	139.8°W	0600	98	09	12	02	0	1012.5	1	1.4	82.2	75.2	82.8	1	1	2	5	X	X	09	2	1
6/9	09.6°S	139.8°W	1200	98	07	14	02	0	1011.9	6	0.7	82.1	76.0	82.5	2	1	2	5	X	X	09	2	2
6/9	09.6°S	139.8°W	1800	98	08	12	15	1	1014.6	2	1.7	82.6	77.0	82.7	2	2	9	5	0	0	08	2	2
6/10	09.5°S	140.1°W	0000	98	05	10	01	8	1011.9	7	2.0	82.7	76.8	83.2	3	2	9	5	5	0	07	2	2
6/10	09.2°S	140.1°W	1900	98	11	16	01	0	1012.9	1	0.7	82.9	77.5	82.8	2	1	2	5	5	0	11	2	2
6/13	08.5°S	139.5°W	0600	98	11	13	01	0	1012.5	2	2.4	81.6	75.4	82.3	1	1	1	4	0	0	09	3	3
6/13	07.9°S	139.0°W	1200	98	09	14	02	0	1011.9	6	1.0	81.0	76.0	82.3	1	1	1	4	0	0	12	3	2
6/13	07.0°S	139.1°W	1800	98	10	11	02	0	1013.5	2	1.7	82.7	76.1	82.3	3	2	1	4	0	1	12	2	1
6/14	06.1°S	139.2°W	0000	97	09	10	15	8	1011.2	7	1.7	82.1	77.4	83.1	6	5	9	4	6	0	10	4	1
6/14	05.3°S	139.2°W	0600	98	11	10	01	8	1012.9	2	2.0	81.3	77.0	82.3	1	1	X	X	X	X	12	2	1
6/14	04.3°S	139.4°W	1200	98	11	08	00	0	1011.2	7	1.4	80.2	76.0	81.9	1	1	1	4	0	0	12	2	1
6/14	03.4°S	139.5°W	1800	97	12	14	03	0	1012.9	1	1.7	82.4	77.0	82.0	2	2	2	4	0	3	12	2	2
6/15	02.5°S	139.6°W	0000	98	08	10	01	1	1010.5	6	2.0	82.0	77.0	82.1	6	6	2	6	0	0	11	2	1
6/15	01.7°S	139.7°W	0600	98	10	12	00	1	1011.5	1	1.7	80.8	76.1	80.7	X	X	X	X	X	X	11	2	1
6/15	00.8°S	139.7°W	1200	97	09	08	02	0	1010.2	8	1.5	79.0	75.8	80.4	1	1	1	4	0	0	10	2	0
6/15	00.0°	140.0°W	1800	98	11	10	02	0	1011.9	1	1.0	81.2	76.0	81.1	2	2	2	5	0	0	08	2	0
6/16	00.5°N	140.5°W	0000	98	12	08	02	1	1008.8	7	2.0	82.0	76.0	83.0	6	6	2	4	0	0	12	2	0
6/16	01.1°N	141.1°W	0600	97	11	12	02	1	1009.1	2	1.7	81.9	76.2	82.9	1	1	1	4	0	0	11	3	1
6/16	01.9°N	141.7°W	1200	98	10	11	02	0	1008.5	7	2.0	81.6	75.5	82.8	1	1	2	X	X	X	11	2	1
6/16	02.6°N	142.2°W	1800	98	12	11	02	0	1010.2	2	1.4	82.4	75.0	82.8	3	3	2	0	0	0	11	2	1
6/17	03.4°N	142.6°W	0000	97	12	10	01	0	1008.1	7	1.7	83.2	75.8	83.4	1	1	1	4	0	1	12	2	1

Table 9.--Weather observations (USWB 1210-F), Hugh M. Smith cruise 45 (cont'd)

Date, 1958	Latitude	Longitude	Time, GCT	Visibility	Wind		Weather		Pressure			Temperature			Clouds						Waves		
					Direction	Speed, kt.	Present	Past	Bar. corr., mb.	Characteristic	Amt. change	Dry bulb, °F.	Wet bulb, °F.	Sea water, °F.	Total amount	Amount low	Type low	Height low	Type middle	Type high	Direction	Period	Height
6/17	04.1°N	143.0°W	0600	98	13	12	02	0	1009.8	1	2.0	82.1	76.2	83.0	1	1	2	6	X	X	11	2	1
6/17	04.7°N	143.4°W	1200	98	13	13	03	0	1008.8	8	1.4	82.0	75.5	83.2	2	2	2	4	0	0	12	3	2
6/17	05.4°N	143.8°W	1800	97	09	12	81	8	1011.2	2	2.0	78.0	76.5	82.9	8	8	9	4	X	X	08	3	2
6/18	06.1°N	144.2°W	0000	98	29	03	80	8	1009.5	6	1.4	80.2	77.0	83.0	8	8	9	5	X	X	09	2	1
6/18	06.8°N	144.7°W	0600	98	12	11	00	8	1011.2	2	1.7	81.7	77.0	83.5	X	X	X	X	X	X	09	2	1
6/18	07.4°N	145.1°W	1200	97	09	15	01	8	1010.2	8	1.7	81.6	77.5	83.2	2	2	2	4	0	0	08	2	2
6/18	07.9°N	145.6°W	1800	97	08	09	15	8	1012.2	2	1.4	82.8	77.8	82.8	2	2	3	4	3	2	06	2	2
6/19	08.6°N	146.2°W	0000	97	06	09	01	0	1010.8	7	1.7	82.9	72.1	83.2	3	3	2	4	0	0	05	2	2
6/19	09.2°N	146.7°W	0600	97	04	14	02	0	1011.5	2	1.4	81.6	76.8	82.7	2	2	2	4	0	0	04	2	2
6/19	09.9°N	147.2°W	1200	98	03	14	50	1	1011.9	7	1.0	80.1	76.0	82.0	6	6	2	4	X	X	03	2	2
6/19	10.6°N	147.9°W	1800	97	05	16	25	8	1012.2	3	1.5	80.6	77.6	82.0	7	5	9	4	6	0	03	2	2
6/20	11.3°N	148.5°W	0000	97	05	21	16	8	1011.5	8	0.7	81.4	77.8	82.0	6	4	2	4	7	5	04	2	4
6/20	12.0°N	149.1°W	0600	98	05	22	01	8	1012.9	2	2.0	80.0	77.0	80.5	4	4	2	5	X	X	05	2	3
6/20	12.6°N	149.5°W	1200	97	05	16	00	X	1013.2	7	1.4	77.7	76.0	79.2	4	X	X	X	X	X	05	2	3
6/20	13.3°N	150.1°W	1800	96	06	21	60	5	1014.2	1	1.4	78.3	75.3	79.7	8	8	7	5	X	X	05	2	3
6/21	14.0°N	150.6°W	0000	98	05	22	02	2	1013.9	6	1.4	78.3	74.0	79.1	5	3	4	5	5	9	06	2	3
6/21	14.7°N	151.1°W	0600	97	07	20	03	2	1014.9	2	1.4	77.9	72.5	78.0	6	6	4	4	X	X	05	2	2
6/21	15.3°N	151.6°W	1200	97	07	18	01	1	1014.6	8	0.7	77.1	72.0	77.8	2	2	2	4	0	0	05	2	2
6/21	16.0°N	152.2°W	1800	96	04	16	20	1	1016.6	1	2.0	77.0	71.6	77.1	7	7	7	4	0	0	05	2	2
6/22	16.7°N	152.8°W	0000	97	05	15	02	1	1015.2	7	1.4	78.9	71.1	77.1	2	2	2	4	0	0	03	2	2
6/22	17.2°N	153.7°W	0600	97	05	16	02	0	1015.2	3	1.0	76.2	69.7	77.1	2	2	2	5	0	0	06	2	2
6/22	17.8°N	154.3°W	1200	97	05	09	50	0	1015.2	6	1.4	76.3	71.0	76.9	4	3	7	3	X	X	05	2	2
6/22	18.4°N	155.1°W	1800	98	06	13	01	0	1016.3	2	1.4	77.4	71.3	77.1	1	1	4	4	0	0	04	2	2
6/23	19.0°N	155.8°W	0000	98	12	18	03	0	1014.9	8	0.9	77.9	71.6	77.7	3	3	3	5	0	0	09	2	1
6/23	19.6°N	156.4°W	0600	97	23	13	03	8	1014.2	2	1.0	77.2	71.0	77.9	7	3	2	6	6	0	28	2	1
6/23	20.2°N	156.9°W	1200	97	07	17	00	1	1014.2	7	0.7	76.2	71.9	77.6	3	3	2	4	0	0	06	2	1
6/23	21.1°N	157.6°W	1800	98	05	14	15	8	1014.9	2	1.5	76.8	69.8	77.8	6	4	9	5	6	0	08	2	2

Table 10.--Surface salinity and temperature observations taken at locations other than bathythermograph lowerings, Charles H. Gilbert cruises 35 and 38, and Hugh M. Smith cruises 43 and 45

Vessel	Date, GCT	Time, GCT	Position		Salinity, ‰	Temp., °F.
			Latitude	Longitude		
CHG-35	10/13/57	1800	08°56'S	140°05'W	35.75	82.2
"	10/23/57	1520	"	"	35.81	81.6
"	11/29/57	2300	09°48'S	139°02'W	35.64	82.2
"	12/3/57	0105	08°56'S	140°05'W	35.73	83.0
HMS-43	1/15/58	1846	08°56'S	140°05'W	35.75	85.5
"	1/16/58	1800	08°54'S	140°02'W	34.04	83.4
"	1/17/58	1430	08°50'S	140°02'W	35.71	83.5
"	"	1908	08°58'S	140°10'W	35.52	84.4
"	"	1956	"	"	32.12	83.0
"	1/21/58	0554	08°55'S	139°32'W	35.73	83.1
"	1/22/58	0552	09°48'S	139°02'W	35.75	82.9
"	1/22/58	1526	"	"	35.70	82.0
"	1/25/58	1550	09°20'S	140°04'W	35.81	83.2
"	"	2100	08°58'S	140°10'W	23.48	83.6
"	1/26/58	1556	08°56'S	140°05'W	35.82	82.8
"	1/27/58	1530	08°54'S	140°02'W	29.87	83.3
"	"	?	"	"	35.52	83.3
"	"	?	"	"	27.34	83.0
"	"	1925	08°50'S	140°02'W	35.70	83.8
"	"	2105	"	140°04'W	35.12	84.2
"	2/3/58	1554	08°56'S	140°05'W	35.75	83.0
"	2/4/58	0043	08°58'S	140°10'W	32.54	80.8
"	"	1520	08°54'S	140°00'W	34.92	82.7
"	"	1700	"	140°02'W	8.55	77.2
"	"	2212	"	"	25.05	87.0
"	2/5/58	0150	08°56'S	140°05'W	35.68	84.6
"	2/8/58	1800	"	139°32'W	33.53	82.2
"	"	2035	"	139°35'W	25.03	87.0
"	2/12/58	1650	08°50'S	140°02'W	35.77	81.5
"	2/13/58	0045	08°56'S	140°05'W	35.75	85.8
"	2/14/58	2014	08°58'S	140°10'W	33.53	85.3
"	2/15/58	0127	08°56'S	140°05'W	35.73	85.3
CHG-38	2/26/58	1540	08°56'S	140°05'W	35.89	84.1
"	"	2315	08°58'S	140°09'W	-	86.5
"	3/3/58	1728	09°54'S	139°05'W	35.80	84.0
"	3/9/58	0212	08°56'S	140°05'W	35.95	84.4
"	"	1613	"	"	35.84	83.5
"	3/10/58	0225	08°58'S	140°10'W	34.08	84.4
"	3/24/58	1603	08°56'S	140°05'W	35.96	84.1
"	3/25/58	1605	"	"	35.93	84.0
"	4/2/58	1740	08°58'S	140°10'W	35.59	84.3
"	4/9/58	1805	08°54'S	140°02'W	35.89	84.4
"	4/10/58	1545	08°56'S	140°05'W	35.95	84.4
"	4/15/58	1620	09°59'S	139°06'W	36.05	84.2
"	4/19/58	2300	08°56'S	140°05'W	35.95	86.3
"	4/20/58	0200	08°58'S	140°10'W	33.52	85.6
"	"	1605	08°56'S	140°05'W	35.98	84.8
HMS-45	5/12/58	2215	08°58'S	140°09'W	35.67	84.8
"	5/13/58	1530	08°54'S	140°02'W	32.41	81.5
"	"	2018	08°55'S	140°02'W	35.56	85.5
"	5/18/58	2225	08°58'S	140°09'W	35.52	84.5
"	5/22/58	1910	"	"	35.60	82.5
"	6/6/58	1530	09°48'S	139°02'W	34.74	74.0
"	"	2155	09°46'S	139°08'W	33.96	84.0
"	6/11/58	1840	08°58'S	140°09'W	34.81	82.0
"	"	2240	08°54'S	140°02'W	27.75	82.0

Table 11.--Transparency, water color, and related observations, Charles H. Gilbert cruise 35

Date, 1957	Time, LT	Position		Secchi disc, meters	Water color (Forel)	Sea[1/]	Wind[2/]	Percent sky cover
		Latitude	Longitude					
10/14	1145	08°23'S	140°32'W	27.4	2.0	2	07-15	70-80
10/15	1100	07°47'S	140°02'W	29.3	2.0	2	08-10	60
10/16	1100	08°40'S	139°20'W	30.2	2.0	2	09-12	70-80
10/17	1100	09°32'S	138°52'W	25.6	2.0	2	08-09	70-80
10/18	1110	10°15'S	138°34'W	-	2.0	3	10-18	90
10/19	1110	09°59'S	139°11'W	21.9	2.0	4	11-17	100
10/20	1115	09°30'S	139°56'W	32.9	2.0	2	12-14	20-30
10/24	1100	09°06'S	139°11'W	28.3	2.0	3	09-15	50
10/25	1100	09°18'S	136°22'W	33.8	2.5	2	09-10	20-30
10/26	1100	09°13'S	137°37'W	32.9	2.0	1	09-12	100
10/29	1100	11°20'S	139°25'W	30.2	2.0	3	07-17	100

[1/] Sea state coded according to H. O. Pub. No. 606-c, second edition, 1956.

[2/] Wind direction and speed coded according to U. S. Weather Bureau, Circular M.

Table 12.--Transparency, water color, and related observations, Hugh M. Smith cruise 43

Date, 1958	Time, LT	Position		Secchi disc, meters	Water color (Forel)	Sea[1/]	Wind[2/]	Percent sky cover
		Latitude	Longitude					
1/18	1230	08°27'S	140°41'W	17.4	3	3	NE-18	60
1/19	1231	07°52'S	140°10'W	17.4	3	4	NE-14	40
1/20	1227	08°52'S	139°12'W	12.8	3	4	NE-15	60
1/21	1300	09°29'S	138°52'W	13.7	3	3	NE-14	20
1/22	1227	10°08'S	138°47'W	17.4	3	3	NE-12	60
1/23	1229	09°57'S	139°26'W	11.9	3	2	N -11	60
1/24	1200	09°34'S	139°50'W	15.5	3	2	NE-10	40
1/28	1215	09°18'S	137°48'W	14.6	3	3	E -16	70
1/29	1220	09°10'S	136°46'W	26.5	3	2	NE- 8	40
1/30	1231	09°12'S	139°23'W	11.9	3	3	NE-16	80
1/31	1232	11°19'S	139°38'W	14.6	3	3	E -18	40
2/1	1232	12°14'S	139°38'W	17.4	3	3	E -12	30
2/2	1232	09°32'S	139°40'W	18.3	3	3	E -14	70
2/5	1245	09°12'S	140°32'W	18.3	3	3	E -16	20
2/6	1245	09°03'S	142°35'W	17.4	3	3	E -13	30
2/7	1240	09°10'S	141°22'W	18.3	3	4	E -18	10
2/9	1234	08°13'S	139°40'W	17.4	3	3	E -18	50
2/10	1233	05°54'S	139°30'W	27.4	3	3	E -14	10
2/11	1232	07°32'S	139°34'W	18.3	3	2	E -11	30

[1/] Sea state coded according to H. O. Pub. No. 606-c, second edition, 1956.

[2/] Wind direction in compass points (true), and speed in knots.

Table 13.--Transparency, water color, and related observations, Charles H. Gilbert cruise 38

Date, 1958	Noon position [1]		Secchi disc, meters	Water color (Forel)	Sea [2]	Wind [3]	Percent sky cover
	Latitude	Longitude					
2/27	08°34'S	140°36'W	22.9	3-4	2	NE - 7	30
2/28	07°42'S	140°10'W	25.6	3	3	NW - 6	30
3/1	08°42'S	139°18'W	25.6	3	2	NNW- 7	60
3/2	09°28'S	138°53'W	25.6	3	2	ENE- 11	20
3/3	10°06'S	138°52'W	25.6	3	2	NE - 10	40
3/4	10°02'S	139°06'W	18.3	4	2	NE - 14	20
3/5	09°36'S	139°48'W	27.4	3	2	NE - 7	20
3/6	09°34'S	139°49'W	21.9	4	3	NE - 15	20
3/26	09°10'S	138°58'W	22.9	3	3	E - 9	50
3/27	09°12'S	136°36'W	28.3	4	3	E - 8	50
4/11	08°32'S	140°40'W	26.5	3	2	NE - 9	20
4/12	07°50'S	140°06'W	25.6	3	2	E - 11	40
4/13	08°44'S	139°32'W	21.9	3-4	3	E - 14	20
4/15	10°12'S	138°50'W	19.2	3-4	3	E - 14	70

[1] All observations taken at 1200 LT.

[2] Sea state coded according to H.O. Pub. No. 606-c, second edition, 1956.

[3] Wind direction in compass points (true), and speed in knots.

Table 14.--Transparency, water color, and related observations, Hugh M. Smith cruise 45

Date, 1958	Time, LT	Position		Secchi disc, meters	Water color (Forel)	Sea [1]	Wind [2]	Percent sky cover
		Latitude	Longitude					
5/15	1205	09°14'S	138°58'W	31.1	3	2	10-12	20-30
5/16	1210	09°10'S	136°27'W	29.3	2	2	10-12	20-30
5/17	1210	09°16'S	138°03'W	29.3	2	2	09-12	20-30
5/19	1210	09°16'S	140°28'W	25.6	3	2	09-20	20-30
5/20	1210	09°17'S	142°54'W	27.4	2	2	09-14	10
5/21	1210	09°14'S	141°21'W	27.4	2	2	13-15	70-80
5/23	1210	08°24'S	139°40'W	31.1	2	2	08-14	70-80
5/24	1220	05°58'S	139°36'W	32.9	2	1	10-05	20-30
5/25	1215	07°24'S	139°42'W	32.9	2	2	08-05	20-30
5/27	1215	10°00'S	139°40'W	23.7	3	2	08-18	20-30
5/28	1215	12°20'S	139°43'W	31.1	2	2	02-17	50
5/29	1210	10°55'S	139°45'W	32.9	2	2	02-12	40
6/1	1210	08°29'S	140°38'W	29.3	2	2	04-16	20-30
6/2	1210	07°45'S	140°12'W	31.1	2	1	05-14	10
6/3	1220	08°40'S	139°20'W	32.9	2	2	08-14	10
6/5	1300	09°28'S	138°54'W	21.9	2	3	09-16	40
6/7	1210	10°19'S	138°30'W	25.6	2	3	09-18	10
6/8	1210	09°48'S	139°29'W	31.1	2	2	06-14	20-30

[1] Sea state coded according to H.O. Pub. No. 606-c, second edition, 1956.

[2] Wind direction and speed coded according to U. S. Weather Bureau, Circular M.

Table 15.--Zooplankton station data and sample volumes, Charles H. Gilbert cruise 35

Station	Sample	Date, 1957	Time, +10 ZT	Position		Depth, m.	Water strained, $m.^3$	Volume, $cc./1000\ m.^3$ 1/
				Latitude	Longitude			
1	1	10/4	0001-0032	17°40'N	155°12'W	0-140	1830.6	18
2	1	10/5	0000-0031	14°40'N	153°11'W	"	1707.5	15
3	1	10/6	0000-0030	11°42'N	151°30'W	"	2515.0	18
5	1	10/8	0000-0031	05°53'N	147°52'W	"	2465.6	24
6	1	10/9	0000-0030	03°10'N	146°18'W	"	2369.0	31
7	1	10/9-10	2358-0030	00°17'N	144°32'W	"	2307.2	37
9	1	10/11-12	2357-0027	06°00'S	141°53'W	"	2363.6	17
18	1	10/21	0639-0711	09°34'S	139°50'W	"	2185.1	30
19	1	"	0714-0745	"	"	"	2112.5	39
20	1	"	0935-1005	"	"	"	1927.0	31
21	1	"	1008-1037	"	"	"	1895.9	36
22	1	"	1235-1305	"	"	"	1789.0	41
23	1	"	1306-1334	"	"	"	1860.8	39
24	1	"	1532-1603	"	"	"	2082.5	38
25	1	"	1606-1637	"	"	"	2068.2	47
26	1	"	1833-1905	"	"	"	2331.2	67
27	1	"	1907-1937	"	"	"	1842.2	58
28	1	"	2135-2205	"	"	"	1735.6	79
29	1	"	2206-2238	"	"	0-143	1979.1	69
30	1	10/22	0043-0113	"	"	0-140	2039.6	70
31	1	"	0114-0144	"	"	"	2078.5	62
32	1	"	0331-0359	"	"	"	1733.9	86
33	1	"	0401-0432	"	"	"	2073.1	73
35	1	10/24	2201-2229	09°16'S	137°52'W	0-182	1681.0	20
36	1	"	2233-2301	"	"	0-140	1546.8	20
38	1	10/25	0159-0230	09°22'S	137°30'W	"	1316.0	24
38A	1	"	0232-0301	"	"	"	1487.2	27
38B	1	"	2156-2227	09°14'S	136°20'W	"	1760.4	18
39	1	"	2229-2301	"	"	"	1797.9	19
41	1	10/26	0158-0229	09°14'S	136°34'W	0-173	1750.1	25
42	1	"	0230-0301	"	"	0-140	1694.2	25
44	1	"	2159-2229	09°17'S	139°02'W	"	1486.1	22
45	1	"	2231-2303	"	"	"	1582.7	21
47	1	10/27	0154-0224	09°17'S	139°16'W	"	1558.2	37
48	1	"	0226-0257	"	"	"	1463.9	46
50	1	"	2200-2230	11°03'S	139°33'W	"	1530.1	34
51	1	"	2232-2300	"	"	"	1354.9	34
53	1	10/28	0158-0228	11°22'S	139°27'W	"	1533.9	33
54	1	"	0230-0301	"	"	"	1655.9	40
55	1	"	2200-2231	12°23'S	139°36'W	"	2011.0	38
56	1	"	2232-2300	"	"	"	1722.6	38
58	1	10/29	0158-0227	12°09'S	139°30'W	"	1527.4	37
59	1	"	0229-0258	"	"	"	1453.1	38
60	1	10/30	0200-0228	09°36'S	139°44'W	"	1134.0	41
61	1	"	0229-0300	"	"	"	1336.5	36
62A	1	11/1	2158-2229	07°20'S	139°32'W	"	1663.2	32
63	1	"	2231-2259	"	"	"	1414.5	41
65	1	11/2	0157-0227	07°06'S	139°30'W	"	3365.6	23
66	1	"	0232-0300	"	"	"	1633.8	43
67	1	"	2157-2227	06°04'S	139°50'W	"	1788.8	18
68	1	"	2229-2300	"	"	"	1915.1	30

1/ All fish, fish eggs, jellies >2 cm. in length, and other organisms >5 cm. in length are not included.

Table 15.--Zooplankton station data and sample volumes, Charles H. Gilbert cruise 35 (cont'd)

Station	Sample	Date, 1957	Time, +10 ZT	Position		Depth, m.	Water strained, $m.^3$	Volume, cc./1000 $m.^3$ 1/
				Latitude	Longitude			
70	1	11/3	0202-0233	06°26'S	139°52'W	0-140	1807.4	28
71	1	"	0249-0319	"	"	"	1755.8	44
73	1	"	2205-2234	08°36'S	139°31'W	"	1390.0	27
74	1	"	2235-2305	"	"	"	1408.0	28
76	1	11/4	0200-0230	08°54'S	139°38'W	"	854.4	55
77	1	"	0234-0304	"	"	"	715.8	71
79	1	"	2158-2228	09°13'S	141°35'W	"	2218.6	23
80	1	"	2231-2302	"	"	"	2168.1	33
82	1	11/5	0156-0226	09°12'S	142°00'W	"	1813.9	29
83	1	"	0228-0256	"	"	"	1786.6	24
84	1	"	2159-2229	09°15'S	142°46'W	"	1490.9	32
85	1	"	2232-2304	"	"	"	1580.6	33
87	1	11/6	0158-0229	09°18'S	142°23'W	"	1496.6	25
88	1	"	0234-0303	"	"	"	1449.6	31
90	1	"	2156-2226	09°15'S	140°33'W	"	1267.4	43
91	1	"	2228-2258	"	"	"	1192.9	48
93	1	11/7	0158-0228	09°13'S	140°10'W	"	1264.4	62
94	1	"	0232-0302	"	"	"	1074.6	64
97	1	11/9	0034-0104	11°20'S	142°19'W	"	1535.8	61
99	1	11/10	0032-0102	13°45'S	144°54'W	"	1738.3	30
103	1	11/14	0000-0031	16°53'S	148°58'W	"	1893.8	11
104	1	11/19	0000-0030	16°29'S	148°24'W	"	1863.0	10
106	1	11/20	0000-0031	14°46'S	145°48'W	"	1886.8	36
107	1	11/21	0000-0030	12°28'S	143°33'W	"	1663.5	36
108	1	11/22	0000-0030	10°14'S	141°18'W	"	1390.5	67
119	1	12/1	0508-0538	09°34'S	139°50'W	"	1705.9	33
120	1	"	0539-0611	"	"	0-143	1936.4	27
121	1	"	0805-0836	"	"	0-140	1709.6	23
122	1	"	0839-0908	"	"	"	1917.3	23
123	1	"	1105-1137	"	"	"	1681.6	23
124	1	"	1139-1210	"	"	"	1599.5	21
125	1	"	1406-1437	"	"	0-142	1765.8	20
126	1	"	1439-1510	"	"	"	1809.0	21
127	1	"	1705-1735	"	"	0-140	1361.9	32
128	1	"	1736-1807	"	"	"	1352.2	45
129	1	"	2003-2033	"	"	"	1375.9	33
130	1	"	2034-2106	"	"	"	1503.4	46
131	1	"	2305-2335	"	"	"	1481.8	39
132	1	12/1-2	2337-0006	"	"	"	1516.9	37
133	1	12/2	0204-0234	"	"	"	1564.6	44
134	1	"	0236-0305	"	"	"	1649.7	98
136	1	12/5	0000-0030	05°55'S	141°56'W	"	1728.8	28
137	1	12/6	0000-0030	02°55'S	143°32'W	0-147	1895.1	16
138	1	12/7	0000-0030	00°18'N	145°54'W	0-140	2282.6	31
139	1	12/8	0000-0028	03°06'N	146°44'W	"	2178.6	34
140	1	12/9	0000-0031	06°08'N	148°28'W	"	2148.7	25
141	1	12/10	0000-0031	09°10'N	150°10'W	"	2399.8	15
142	1	12/11	0000-0031	12°09'N	152°14'W	"	2255.6	14

1/ All fish, fish eggs, jellies >2 cm. in length, and other organisms >5 cm. in length are not included.

Table 16.--Zooplankton station data and sample volumes, Hugh M. Smith cruise 43

Station	Sample	Date, 1958	Time[1/]	Position		Depth, m.	Water strained, m.^{3}	Volume, cc./1000 m.^{3} [2/]
				Latitude	Longitude			
1	1	1/5	2010-2042	18°04'N	155°45'W	0-140	1564.4	11
2	1	1/6	2012-2045	15°03'N	153°57'W	0-145	1899.8	6
3	1	1/7	2011-2042	12°13'N	152°12'W	0-155	1495.4	14
4	1	1/8	2008-2040	09°24'N	150°46'W	0-145	1332.9	33
5	1	1/9	2005-2030	06°42'N	149°00'W	0-144	1114.9	27
6	1	1/10	2012-2044	04°00'N	147°21'W	0-140	1615.7	18
7	1	1/11	2004-2035	01°21'N	145°55'W	0-148	1746.9	30
8	1	1/12	2003-2042	01°35'S	144°32'W	0-136	2199.2	43
9	1	1/13	2006-2037	04°32'S	142°49'W	0-146	1530.4	89
10	1	1/14	2004-2038	07°41'S	141°05'W	0-140	2186.5	86
22	1	1/23	1622-1655	09°34'S	139°50'W	0-145	1991.9	21
	2	"	1825-1855	"	"	"	2023.7	30
	3	"	2005-2040	"	"	0-158	2104.9	43
	4	"	2207-2238	"	"	0-140	1711.4	64
	5	1/24	0013-0048	"	"	"	2223.4	63
	6	"	0210-0241	"	"	0-141	1887.6	60
	7	"	0408-0438	"	"	0-148	1787.0	50
	8	"	0615-0649	"	"	0-158	1716.8	24
	9	"	0803-0832	"	"	0-140	1528.0	23
	10	"	1012-1042	"	"	0-149	1568.6	18
	11	"	1208-1245	"	"	0-158	1986.8	22
	12	"	1401-1431	"	"	0-140	1559.6	21
30	1	1/27	2116-2151	09°12'S	139°17'W	0-141	1755.7	65
32	1	1/28	0313-0342	09°12'S	138°48'W	0-160	1300.0	65
34	1	"	2110-2140	09°10'S	136°50'W	0-147	1750.6	26
36	1	1/29	0313-0343	09°10'S	136°18'W	0-145	1617.9	35
39	1	1/30	2109-2139	09°37'S	139°40'W	0-148	1688.4	25
41	1	1/31	0312-0342	10°14'S	139°38'W	"	1516.8	58
42	1	"	2112-2142	12°02'S	139°36'W	0-154	1466.3	15
44	1	2/1	0313-0343	12°31'S	139°34'W	0-185	1158.6	18
47	1	"	2110-2141	11°16'S	139°42'W	0-141	1551.1	51
49	1	2/2	0313-0343	10°43'S	139°39'W	"	582.7	98
57	1	2/5	2118-2145	09°07'S	141°05'W	"	1264.6	38
59	1	2/6	0319-0344	09°08'S	141°32'W	0-142	1384.6	41
60	1	"	2113-2143	09°13'S	143°02'W	0-140	1403.1	54
62	1	2/7	0315-0337	09°15'S	142°26'W	0-145	1468.9	27
64	1	"	2109-2133	09°13'S	140°41'W	0-167	1039.8	52
66	1	2/8	0318-0348	09°16'S	140°06'W	0-140	1511.9	35
70	1	2/9	2110-2137	07°35'S	139°40'W	"	1164.9	103
71	1	2/10	0330-0359	06°52'S	139°40'W	0-141	1386.1	26
73	1	"	2113-2142	05°37'S	139°50'W	0-140	1363.7	33
75	1	2/11	0319-0347	06°21'S	139°38'W	0-141	1279.6	48
76	1	"	2120-2146	08°30'S	139°40'W	0-140	957.7	100
78	1	2/12	0312-0341	09°03'S	139°45'W	"	1199.9	69
83	1	2/15	2002-2032	08°23'S	140°38'W	0-149	930.7	70
84	1	2/16	2005-2035	05°19'S	142°25'W	0-146	1137.2	27
85	1	2/17	2001-2031	02°10'S	144°08'W	0-149	1143.1	42

[1/] Stations 10 through 83 are on +9 ZT; others are on +10 ZT.

[2/] Jellies >2 cm. in length and other organisms >5 cm. in length are not included.

Table 16.--Zooplankton station data and sample volumes, Hugh M. Smith cruise 43 (cont'd)

Station	Sample	Date, 1958	Time[1/]	Position		Depth, m.	Water strained, $m.^3$	Volume, $cc./1000\ m.^3$ [2/]
				Latitude	Longitude			
86	1	2/18	2007-2042	01°22'N	145°59'W	0-163	1172.0	64
87	1	2/19	2002-2032	04°40'N	147°23'W	0-161	1351.6	70
88	1	2/20	2010-2039	07°49'N	148°37'W	0-142	1506.1	27
89	1	2/21	2009-2033	11°06'N	150°42'W	0-140	1301.0	30
90	1	2/22	2005-2040	14°29'N	152°31'W	"	1965.1	19
91	1	2/23	2007-2037	17°25'N	154°52'W	"	1651.4	9
92	1	2/24	2005-2034	20°03'N	157°06'W	0-147	1278.4	18

[1/] Stations 10 through 83 are on +9 ZT; others are on +10 ZT.

[2/] Jellies >2 cm. in length and other organisms >5 cm. in length are not included.

Table 17.--Zooplankton station data and sample volumes, Charles H. Gilbert cruise 38

Station	Sample	Date, 1958	Time, +10 ZT	Position		Depth, m.	Water strained, $m.^3$	Volume, cc./1000 $m.^3$ [1/]
				Latitude	Longitude			
1	1	2/9	2023-2053	19°05'N	156°44'W	0-140	1722.5	58
2	1	2/10	2020-2051	16°26'N	155°19'W	"	1485.4	10
3	1	2/13	2005-2036	08°15'N	151°32'W	"	1836.9	56
4	1	2/14	2005-2036	05°31'N	150°06'W	"	1945.2	32
6	1	2/15	2012-2041	04°27'N	149°56'W	"	1444.9	44
8	1	2/16	2009-2036	03°28'N	149°58'W	"	1648.3	40
10	1	2/17	2019-2049	02°31'N	150°08'W	0-142	1716.4	38
12	1	2/18	2005-2036	01°30'N	150°15'W	0-140	1902.2	29
14	1	2/19	2003-2033	00°35'N	150°10'W	0-115	915.1	36
16	1	2/20	2005-2035	00°14'S	150°04'W	0-140	1702.5	62
18	1	2/21	2019-2052	01°10'S	149°44'W	"	1700.8	29
19	1	2/22	2002-2032	03°05'S	147°40'W	"	2045.3	29
20	1	2/23	2000-2031	04°59'S	145°02'W	"	2196.6	35
21	1	2/24	2006-2036	07°12'S	142°10'W	"	2084.7	43
34A	1	3/6	0706-0736	09°34'S	139°50'W	"	1885.5	11
B	1	"	0903-0933	"	"	0-141	1476.7	13
C	1	"	1105-1137	"	"	0-140	1896.6	14
D	1	"	1308-1338	"	"	"	1938.8	9
E	1	"	1508-1536	"	"	"	1486.8	12
F	1	"	1707-1737	"	"	0-142	1949.7	16
G	1	"	1906-1936	"	"	"	1902.2	24
H	1	"	2110-2140	"	"	0-140	1624.9	34
I	1	"	2306-2337	"	"	0-142	1737.6	40
J	1	3/7	0105-0135	"	"	0-140	1907.0	38
K	1	"	0303-0334	"	"	0-142	1884.9	53
L	1	"	0504-0534	"	"	0-140	1703.9	34
46	1	3/26	2104-2134	09°11'S	138°06'W	"	1416.2	41
48	1	3/27	0305-0335	09°09'S	137°34'W	0-142	1647.2	55
49	1	"	2004-2035	09°11'S	136°15'W	"	1703.6	36
51	1	3/28	0204-0234	09°07'S	136°56'W	0-140	1776.7	47
53	1	"	2022-2051	09°09'S	138°53'W	"	1394.2	79
55	1	3/29	0203-0232	09°08'S	139°27'W	"	1338.6	73
57	1	"	2004-2034	07°32'S	139°46'W	0-142	1275.6	60
59	1	3/30	0205-0236	06°57'S	139°44'W	"	1363.8	35
60	1	"	2002-2032	05°44'S	139°40'W	0-140	1644.4	38
62	1	3/31	0207-0237	06°20'S	139°39'W	"	1505.8	47
64	1	"	2003-2033	08°10'S	139°44'W	0-142	1475.9	102
66	1	4/1	0206-0236	08°38'S	139°57'W	"	1456.4	61
69	1	4/3	2004-2034	09°08'S	141°14'W	0-140	1543.7	45
71	1	4/4	0209-0239	09°07'S	141°52'W	"	1751.3	43
72	1	"	2002-2033	09°05'S	142°58'W	0-142	1885.5	35
74	1	4/5	0204-0234	09°04'S	142°28'W	"	1657.8	52
75	1	"	2003-2032	09°09'S	140°28'W	0-140	1212.8	48
77	1	4/6	0209-0239	09°12'S	139°57'W	"	1333.3	72
78	1	"	2007-2037	10°52'S	139°45'W	0-142	1407.8	38
80	1	4/7	0204-0235	11°28'S	139°48'W	0-140	1627.7	37
81	1	"	2003-2033	12°32'S	139°43'W	"	1546.5	47
83	1	4/8	0205-0235	12°00'S	139°41'W	"	1921.8	42
84	1	"	2000-2030	10°02'S	139°44'W	0-142	1406.7	70
86	1	4/9	0202-0232	09°24'S	139°51'W	"	1536.7	51

[1/] Jellies >2 cm. in length and other organisms >5 cm. in length are not included.

Table 17.--Zooplankton station data and sample volumes, Charles H. Gilbert cruise 38 (cont'd)

Station	Sample	Date, 1958	Time, +10 ZT	Position		Depth, m.	Water strained, $m.^3$	Volume, cc./1000 $m.^3$ [1]
				Latitude	Longitude			
93A	1	4/17	1211-1241	09°34'S	139°50'W	0-140	1608.2	27
B	1	"	1403-1433	"	"	"	1629.9	23
C	1	"	1602-1632	"	"	"	1512.7	32
D	1	"	1803-1833	"	"	0-142	1847.0	51
E	1	"	2002-2032	"	"	0-140	1630.8	59
F	1	"	2206-2236	"	"	"	1719.8	59
G	1	4/18	0002-0033	"	"	0-142	1697.4	70
H	1	"	0202-0232	"	"	"	1668.4	49
I	1	"	0403-0433	"	"	[2]	1478.7	45
J	1	"	0602-0632	"	"	0-140	1478.4	31
K	1	"	0803-0834	"	"	0-142	1696.3	35
L	1	"	1002-1032	"	"	0-140	1573.3	30
98	1	4/21	2008-2037	08°02'S	140°50'W	[2]	1350.4	50
99	1	4/22	2001-2031	05°21'S	142°26'W	0-142	1582.5	26
100	1	4/23	2003-2033	02°34'S	144°12'W	0-140	1932.6	50
101	1	4/24	2000-2029	00°22'N	145°57'W	"	1935.7	67
102	1	4/25	2003-2033	03°15'N	147°40'W	"	1733.4	52
103	1	4/26	2000-2030	06°02'N	149°07'W	0-138	1537.8	56
104	1	4/28	2004-2034	11°44'N	152°31'W	0-140	1652.2	32
105	1	4/29	2002-2032	14°40'N	154°09'W	"	1503.5	18
106	1	4/30	2006-2036	17°42'N	155°40'W	"	1560.4	17

[1] Jellies >2 cm. in length and other organisms >5 cm. in length are not included.

[2] Depth of tow uncertain due to failure of metering apparatus.

Table 18.--Zooplankton station data and sample volumes, Hugh M. Smith cruise 45

Station	Sample	Date, 1958	Time 1/	Position		Depth, m.	Water strained, $m.^3$	Volume, cc./1000 $m.^3$ 4/
				Latitude	Longitude			
1	1	3/29	2019-2045	18°29'N	155°22'W	0-135	1388.9	13
2	1	3/30	2014-2044	16°12'N	153°04'W	0-132	1545.8	12
3	1	3/31	2008-2035	14°14'N	151°00'W	0-144	1231.3	26
4	1	4/1	2010-2038	12°11'N	148°46'W	0-132	1348.5	23
5	1	4/2	2016-2041	10°08'N	146°29'W	0-127	1077.6	38
6	1	4/3	2013-2039	08°05'N	144°11'W	0-140	1319.8	42
7	1	4/4	2108-2138	06°08'N	141°42'W	0-130	1458.1	47
78	1	5/15	2004-2030	09°08'S	138°10'W	0-140	1392.8	19
79	1	5/16	0317-0346	09°12'S	137°22'W	0-161	1611.1	20
82	1	"	2000-2028	09°10'S	136°10'W	0-140	1432.8	37
83	1	5/17	0320-0347	09°13'S	137°02'W	0-139	1321.9	26
84	1	"	1959-2029	09°12'S	139°07'W	0-125	1601.3	34
87	1	5/19	2000-2029	09°12'S	141°22'W	0-140	1578.1	62
88	1	5/20	0313-0343	09°12'S	142°02'W	0-137	1357.3	31
90	1	"	1955-2026	09°12'S	143°08'W	0-140	1536.0	30
91	1	5/21	0309-0338	09°14'S	142°20'W	"	1592.1	34
94	1	"	2002-2031	09°12'S	140°36'W	0-137	1359.1	80
97	1	5/23	2001-2030	07°39'S	139°45'W	0-140	1421.6	25
98	1	5/24	0314-0343	06°54'S	139°41'W	"	1426.5	21
101	1	"	1958-2028	05°38'S	139°40'W	0-138	1491.0	40
102	1	5/25	0310-0344	06°24'S	139°38'W	0-140	1759.2	24
105	1	"	1959-2034	08°25'S	139°42'W	0-137	1926.3	24
107	1	5/27	2000-2028	10°55'S	139°40'W	0-139	1301.2	66
108	1	5/28	0312-0339	11°30'S	139°39'W	0-144	2165.0	15
110	1	"	2001-2040	12°41'S	139°39'W	0-133	2347.5	21
111	1	5/29	0306-0336	11°58'S	139°40'W	0-124	1459.1	23
113	1	"	1953-2025	10°11'S	139°34'W	0-140	1928.4	76
114	1	5/30	0315-0351	09°25'S	139°34'W	0-146	944.9	73
120	1	6/8	1522-1552	09°34'S	139°50'W	0-122	937.5	38
	2	"	" "	"	"	112-230	606.7	14
121	1	"	1710-1739	"	"	0-125	797.5	49
	2	"	" "	"	"	96-239	445.0	22
122	1	"	1914-1941	"	"	0-126	845.2	88
	2	"	" "	"	"	112-238	1041.1	7
123	1	"	2105-2133	"	"	0-126	941.4	87
	2	"	" "	"	"	71-238	1003.0	6
124	1	"	2313-2347	"	"	0-137	865.6	128
	2	"	" "	"	"	103-240	394.6	19
125	1	6/9	0110-0144	"	"	0-137	852.6	117
	2	"	" ?2/	"	"	70-240	1482.7	12
126	1	"	0308-0335	"	"	0-121	794.0	106
	2	"	" "	"	"	107-229	598.8	9
127	1	"	0510-0539	"	"	0-126	817.8	126
	2	"	" "	"	"	103-238	681.1	15
128	1	"	0711-0737	"	"	0-125	794.3	112
	2	"	" "	"	"	94-245	447.1	12
129	1	"	0910-0937	"	"	0-126	718.5	106
	2	"	" "	"	"	76-238	939.8	14
130	1	"	1108-1149	"	"	0-150	855.4	63
	2	"	" "	"	"	71-262	71.3 3/	196

1/ Stations 7 through 148 are on +9 ZT; others are on +10 ZT.
2/ Messenger time was not recorded.
3/ Flowmeter reading was extremely low.
4/ Jellies >2 cm. in length and other organisms >5 cm. in length are not included.

Table 18.--Zooplankton station data and sample volumes, Hugh M. Smith cruise 45 (cont'd)

Station	Sample	Date, 1958	Time[1/]	Position		Depth, m.	Water strained, $m.^3$	Volume, cc./1000 $m.^3$[4/]
				Latitude	Longitude			
131	1	6/9	1306-1333	09°34'S	139°50'W	0-123	702.0	32
	2	"	" "	"	"	116-239	920.6	15
134	1	6/12	2000-2030	08°33'S	139°34'W	0-138	1623.7	20
135	1	6/13	2002-2038	05°20'S	139°16'W	0-140	2328.5	15
139	1	6/14	1958-2027	02°46'S	139°42'W	0-138	1411 0	200
144	1	6/15	2002-2027	01°02'N	141°02'W	0-140	1211.0	76
148	1	6/16	2002-2038	04°00'N	142°59'W	0-137	1322.6	159
151	1	6/17	2010-2040	06°48'N	144°40'W	0-134	1832.9	62
155	1	6/18	2009-2039	09°13'N	146°43'W	0-140	1534.2	64
156	1	6/19	2010-2043	12°02'N	149°03'W	0-144	1969.8	26
157	1	6/20	2011-2043	14°42'N	151°11'W	0-117	1958.6	25
158	1	6/21	2010-2043	17°14'N	153°40'W	0-134	1950.9	18
159	1	6/22	2009-2045	19°36'N	156°26'W	0-140	2176.9	22

[1/] Stations 7 through 148 are on +9 ZT; others are on +10 ZT.

[4/] Jellies >2 cm. in length and other organisms >5 cm. in length are not included.

Table 19.--Common and scientific names of fish caught

Yellowfin tuna	Neothunnus macropterus (Temminck and Schlegel)
Bigeye tuna	Parathunnus sibi (Temminck and Schlegel)
Skipjack	Katsuwonus pelamis (Linnaeus)
Little tuna	Euthynnus yaito Kishinouye
Dogtooth tuna	Gymnosarda nuda (Günther)
Dolphin	Coryphaena hippurus Linnaeus
Shortnosed spearfish	Tetrapturus angustirostris Tanaka
Black marlin	Istiompax marlina (Jordan and Hill)
Blue marlin	Makaira ampla (Poey)
Striped marlin	Makaira audax (Philippi)
Wahoo	Acanthocybium solandri (Cuvier and Valenciennes)
Whitetip shark	Pterolamiops longimanus (Poey)
Silky shark	Eulamia floridanus (Bigelow, Schroeder, and Springer)
Great blue shark	Prionace glauca (Linnaeus)
Bigeye thresher shark	Alopias superciliosus (Lowe)
Bonito shark	Isurus glaucus Müller and Henle
Hammerhead shark	Sphyrna lewini (Griffith)
Puffer	Lagocephalus lagocephalus (Linnaeus)
Marquesan sardine	Harengula vittata (Cuvier and Valenciennes)
Red snapper	Lutjanus bohar (Forskål)
Green snapper	Aprion virescens Cuvier and Valenciennes
Jack	Caranx ignobilis (Forskål)
Jack	Caranx lugubris Poey
Jack	Caranx melampygus Cuvier and Valenciennes
Barracuda	Sphyraena nigripinnis Temminck and Schlegel
Spiny puffer	Diodon sp.
Rainbow runner	Elagatis bipinnulatus (Quoy and Gaimard)

Table 20.--Surface troll catch and related data, Charles H. Gilbert cruise 35

Date, 1957	Time, LT	Position		Species	Number 1/	Average length, cm.
		Latitude	Longitude			
10/3	0715	19°47'N	156°19'W	Dolphin	1	112.5
10/4	-	-	-	Dolphin	1	53.1
10/6	1130	10°12'N	150°36'W	Dolphin	1	-
10/8	1730	03°55'N	146°41'W	Skipjack	1	70.7
10/11	1630	05°09'S	142°22'W	Skipjack	2	78.8
10/12	1730	08°04'S	140°43'W	Wahoo	1	133.3
10/14	0545	08°58'S	140°10'W	Wahoo	3	130.5
10/14	0600	08°58'S	140°02'W	Little tuna	1	68.3
10/14	0620	08°46'S	140°15'W	Yellowfin	2	90.4
10/14	0940	08°40'S	140°35'W	Little tuna	1	55.1
10/14	0940	08°40'S	140°35'W	Yellowfin	2	82.4
10/14	0940	08°40'S	140°35'W	Wahoo	3	137.5
10/14	0948	08°39'S	140°35'W	Green snapper	5	75.4
10/14	1602	08°00'S	140°44'W	Wahoo	1	148.2
10/15	0510	07°58'S	140°41'W	Yellowfin	8	95.5
10/15	0515	07°58'S	140°40'W	Little tuna	7	66.8
10/15	0607	07°52'S	140°36'W	Wahoo	1	136.4
10/15	0620	07°52'S	140°34'W	Little tuna	2	60.8
10/15	0630	07°50'S	140°33'W	Yellowfin	1	80.7
10/15	1345	07°58'S	139°49'W	Yellowfin	1	60.1
10/17	1000	09°25'S	138°56'W	Jack	2	78.5
10/17	1000	09°25'S	138°56'W	Red snapper	1	80.0
10/17	1010	09°26'S	138°54'W	Jack	4	66.5
10/17	1025	09°30'S	138°52'W	Green snapper	1	80.7
10/17	1030	09°30'S	138°52'W	Yellowfin	1	88.1
10/18	0655	10°02'S	138°50'W	Skipjack	1	47.0
10/19	1002	10°04'S	139°09'W	Wahoo	1	131.1
10/24	0940	09°07'S	139°20'W	Dolphin	1	96.2
10/24	1530	09°08'S	138°38'W	Dolphin	1	96.9
10/26	1302	09°14'S	137°53'W	Yellowfin	1	117.0
10/27	0630	09°28'S	139°38'W	Wahoo	1	103.6
10/29	1045	11°21'S	140°25'W	Dolphin	1	-
11/1	0610	09°08'S	139°38'W	Dolphin	1	93.6
11/1	1400	08°06'S	139°36'W	Dolphin	2	92.2
11/1	1405	08°06'S	139°36'W	Yellowfin	1	88.9
11/1	1405	08°06'S	139°36'W	Wahoo	1	148.5
11/2	0610	06°45'S	139°28'W	Dolphin	1	101.9
11/3	0700	06°54'S	139°50'W	Skipjack	1	78.3
11/3	1700	08°00'S	139°36'W	Skipjack	1	51.6
11/4	1045	09°14'S	140°18'W	Spiny puffer	1	-

1/ Fish of the same species caught within a 1-hour interval were combined in a single number.

Table 20.--Surface troll catch and related data, Charles H. Gilbert cruise 35 (cont'd)

Date, 1957	Time, LT	Position		Species	Number[1/]	Average length, cm.
		Latitude	Longitude			
11/5	1625	09°12'S	143°20'W	Wahoo	1	80.2
11/19	0630	15°56'S	147°48'W	Yellowfin	1	60.4
11/24	0850	08°39'S	140°36'W	Green snapper	1	71.0
11/24	0855	08°34'S	140°40'W	Yellowfin	1	119.5
11/25	0545	07°54'S	140°40'W	Yellowfin	1	111.0
11/25	0835	07°48'S	140°19'W	Little tuna	1	61.9
11/25	0840	07°48'S	140°42'W	Jack	1	54.0
11/25	0905	07°48'S	140°16'W	Green snapper	2	71.9
11/25	1500	08°35'S	139°38'W	Green snapper	2	71.9
11/25	1505	08°36'S	139°38'W	Little tuna	1	45.7
11/25	1507	08°36'S	139°38'W	Dogtooth tuna	1	78.5
11/27	0850	09°18'S	139°04'W	Dogtooth tuna	2	107.7
11/27	0850	09°18'S	139°04'W	Red snapper	6	-
11/27	0852	09°18'S	139°04'W	Jack	7	-
11/27	0900	09°20'S	139°02'W	Green snapper	2	-
11/27	0923	09°22'S	139°00'W	Jack	2	-
11/27	0923	09°22'S	139°00'W	Jack	1	-
11/27	0930	09°22'S	138°59'W	Little tuna	1	-
11/27	0947	09°23'S	138°58'W	Wahoo	1	-
11/27	0950	09°23'S	138°58'W	Rainbow runner	1	-
11/27	1430	09°50'S	138°55'W	Dolphin	1	86.0
11/29	1210	09°52'S	139°06'W	Wahoo	1	129.0
11/30	1715	08°58'S	140°05'W	Yellowfin	2	64.3
12/4	0610	07°58'S	140°44'W	Wahoo	3	130.4
12/4	0654	07°56'S	140°42'W	Yellowfin	3	80.6
12/4	0654	07°56'S	140°42'W	Little tuna	6	56.0
12/8	0730	03°52'N	147°15'W	Skipjack	1	59.8
12/8	1335	04°46'N	147°48'W	Skipjack	3	60.0
12/11	1525	14°06'N	152°21'W	Wahoo	1	134.0
12/13	0930	19°14'N	156°12'W	Yellowfin	2	61.1

[1/] Fish of the same species caught within a 1-hour interval were combined in a single number.

Table 21.--Surface troll catch and related data, Hugh M. Smith cruise 43

Date, 1958	Time, LT	Position		Species	Number[1/]	Average length, cm.
		Latitude	Longitude			
1/7	1130	13°14'N	152°42'W	Dolphin	1	85.6
1/7	1800	12°26'N	152°18'W	Dolphin	1	96.8
1/13	1425	03°57'S	143°11'W	Yellowfin	1	-
1/15	0630	-	-	Wahoo	2	142.7
1/18	0700	08°54'S	140°17'W	Wahoo	1	137.2
1/18	0940	08°41'S	140°36'W	Wahoo	1	117.8
1/19	1015	07°48'S	140°13'W	Wahoo	1	160.8
1/20	0625	08°10'S	139°33'W	Yellowfin	1	73.2
1/21	1212	09°25'S	138°54'W	Jack	1	-
1/21	1222	09°27'S	138°53'W	Jack	4	-
1/21	1235	09°28'S	138°52'W	Red snapper	3	-
1/21	1300	09°29'S	138°52'W	Great blue shark	1	-
1/22	-	-	-	Wahoo	1	157.5
1/23	1405	09°48'S	139°36'W	Yellowfin	3	57.3
1/24	1645	09°25'S	140°07'W	Dolphin	1	105.5
1/25	0640	09°18'S	140°05'W	Yellowfin	2	72.9
1/27	1600	09°05'S	139°46'W	Yellowfin	3	52.2
2/11	1620	08°00'S	139°34'W	Yellowfin	1	73.6
2/11	1830	08°17'S	139°40'W	Wahoo	1	-
2/15	1515	08°59'S	140°10'W	Dolphin	1	108.0
2/22	0640	12°38'N	151°27'W	Dolphin	1	92.2
2/23	0955	16°14'N	153°48'W	Dolphin	1	78.1
2/23	1220	16°33'N	154°03'W	Dolphin	1	86.0
2/23	1715	17°02'N	154°28'W	Dolphin	1	72.5

[1/] Fish of the same species caught within a 1-hour interval were combined in a single number.

Table 22.--Surface troll catch and related data, Charles H. Gilbert cruise 38

Date, 1958	Time, LT	Position		Species	Number[1/]	Average length, cm.
		Latitude	Longitude			
2/10	0840	17°46'N	155°58'W	Dolphin	2	107.8
2/10	1950	17°38'N	155°54'W	Dolphin	1	79.1
2/11	1505	14°26'N	154°21'W	Dolphin	1	80.8
2/14	1730	05°51'N	150°05'W	Puffer	1	-
2/25	0845	08°19'S	140°44'W	Wahoo	1	96.5
2/25	1000	08°27'S	140°38'W	Dolphin	1	123.2
2/25	1435	08°55'S	140°16'W	Yellowfin	1	80.8
2/25	1450	08°57'S	140°14'W	Little tuna	1	59.9
2/25	1450	08°57'S	140°14'W	Rainbow runner	1	55.7
2/27	0625	08°58'S	140°11'W	Yellowfin	1	74.0
2/27	0905	08°48'S	140°18'W	Yellowfin	2	75.8
2/27	1620	08°01'S	140°44'W	Little tuna	1	79.4
2/27	1620	08°01'S	140°44'W	Rainbow runner	1	97.5
2/28	0625	07°55'S	140°40'W	Yellowfin	1	127.1
2/28	1215	07°47'S	140°08'W	Yellowfin	2	77.8
2/28	1642	08°04'S	139°38'W	Yellowfin	1	81.8
2/28	1642	08°04'S	139°38'W	Little tuna	2	56.9
3/1	0530	08°06'S	139°38'W	Wahoo	1	113.0
3/1	1340	08°52'S	139°25'W	Skipjack	2	49.0
3/2	1212	09°29'S	138°53'W	Green snapper	4	-
3/2	1212	09°29'S	138°53'W	Jack	3	-
3/2	1216	09°29'S	138°53'W	Red snapper	1	-
3/2	1550	09°48'S	138°50'W	Yellowfin	2	68.8
3/26	1000	09°11'S	139°13'W	Barracuda	1	103.4
4/3	0920	09°09'S	140°14'W	Barracuda	1	87.5
4/3	1620	09°10'S	140°51'W	Barracuda	1	107.7
4/7	1445	12°48'S	139°46'W	Barracuda	1	91.5
4/9	0705	08°50'S	140°03'W	Dolphin	1	96.0
4/11	0525	08°58'S	140°10'W	Yellowfin	1	74.4
4/11	0942	08°40'S	140°34'W	Green snapper	2	75.2
4/11	1005	08°38'S	140°35'W	Dogtooth tuna	1	111.2
4/11	1720	08°05'S	140°42'W	Little tuna	2	56.2
4/12	0520	07°57'S	140°41'W	Yellowfin	2	82.2
4/12	0525	07°57'S	140°41'W	Wahoo	2	135.6
4/12	0600	07°53'S	140°38'W	Little tuna	1	79.5
4/12	1428	07°55'S	139°59'W	Wahoo	1	117.3
4/12	1428	07°55'S	139°59'W	Little tuna	1	-
4/14	0950	09°25'S	139°04'W	Wahoo	1	143.4
4/14	1455	09°48'S	138°50'W	Wahoo	2	126.2
4/14	1627	09°53'S	138°58'W	Skipjack	1	50.7
4/16	1105	10°02'S	139°07'W	Yellowfin	3	91.4
4/16	1115	10°00'S	139°07'W	Wahoo	3	128.5
4/19	0515	09°20'S	140°04'W	Wahoo	3	126.6
4/19	1025	09°07'S	140°04'W	Dolphin	1	110.7
4/22	1425	05°58'S	142°02'W	Dolphin	2	75.8
4/24	1745	00°06'N	145°47'W	Skipjack	2	47.0

[1/] Fish of the same species caught within a 1-hour interval were combined in a single number.

Table 23.--Surface troll catch and related data, Hugh M. Smith cruise 45

Date, 1958	Time, LT	Position		Species	Number[1]	Average length, cm.
		Latitude	Longitude			
3/30	1405	16°45'N	153°41'W	Dolphin	1	116.0
3/30	1730	16°24'N	153°19'W	Dolphin	1	94.2
4/5	1445	04°39'N	140°01'W	Skipjack	1	70.2
4/29	1430	06°53'S	144°19'W	Wahoo	1	138.0
5/15	1500	09°08'S	138°40'W	Skipjack	1	50.8
5/19	1750	09°12'S	141°06'W	Yellowfin	2	54.8
5/21	0750	09°15'S	141°53'W	Yellowfin	2	60.6
5/21	1655	09°13'S	140°54'W	Yellowfin	2	60.2
5/24	0650	06°33'S	139°38'W	Skipjack	1	74.9
5/25	1700	08°02'S	139°40'W	Wahoo	1	140.8
5/25	1702	08°02'S	139°40'W	Yellowfin	1	79.0
5/28	0815	11°57'S	139°41'W	Skipjack	2	49.5
5/28	1600	12°45'S	139°40'W	Skipjack	1	46.7
5/29	1735	10°26'S	139°36'W	Yellowfin	1	88.0
6/1	0730	08°56'S	140°16'W	Yellowfin	2	74.5
6/5	1200	09°27'S	138°54'W	Jack	2	107.2
6/6	1040	09°53'S	139°09'W	Wahoo	1	143.7
6/6	1200	09°45'S	139°10'W	Wahoo	1	145.5
6/7	0718	09°57'S	138°50'W	Wahoo	1	147.7
6/12	1700	08°47'S	139°49'W	Dolphin	1	80.4
6/21	1000	16°19'N	152°25'W	Wahoo	1	111.5

[1] Fish of the same species caught within a 1-hour interval were combined in a single number.

Table 24.--Longline station data and catch per 100 hooks, Charles H. Gilbert cruise 38

Station	Date, 1958	Noon position		Number of baskets	Number of hooks	Catch per 100 hooks		
		Latitude	Longitude			Yellowfin	Bigeye	Skipjack
5	2/15	04°44'N	150°05'W	44	479	-	0.4	-
7	2/16	03°52'N	150°00'W	44	480	0.2	-	-
9	2/17	02°57'N	150°17'W	44	479	1.7	0.2	0.4
11	2/18	01°53'N	150°20'W	44	480	1.0	0.2	0.2
13	2/19	00°53'N	150°19'W	44	478	0.4	0.8	0.2
15	2/20	00°11'N	150°02'W	44	480	0.4	0.4	-
17	2/21	00°45'S	150°12'W	44	479	0.2	0.2	-

Table 25.--Longline catch record in numbers, length, and sex of fish, Charles H. Gilbert cruise 38

Station	Yellowfin[1/]		Bigeye[1/]		Skipjack		Marlin	Shark
	No.	Length and sex[2/]	No.	Length and sex[2/]	No.	Length and sex[2/]		
5	-	-	2	121.9F, 116.4	-	-	1	2
7	1	131.4	-	-	-	-	1	5
9	8	131.8, 132.0, 119.9F, 124.2M, 126.6F, 124.9, 129.7M, 140.2	1	110.6F	2[3/]	66.4M	-	1
11	5	136.7F, 141.7M, 127.0F, 135.8M, 142.2	1	149.8M	1	71.6F	2	3
13	2	145.1M, 150.2M	4[3/]	142.3F, 138.6F, 126.4M	1	76.8F	1	1
15	2	138.3M, 153.9M	2	168.9M, 162.3M	-	-	-	4
17	1	138.7	1	169.1M	-	-	-	3

[1/] Those fish for which no sex data recorded were tagged and released.

[2/] Fork length in centimeters; M = male, F = female.

[3/] This number includes one shark damaged specimen which was not measured.

Table 26.--Summary of pole-and-line fishing, Charles H. Gilbert cruise 35

Date, 1957	Time, LT	Position		Number of passes	Number of minutes chummed	Number caught and species 1/	Amount of bait, buckets
		Latitude	Longitude				
10/14	0650	08°53'S	140°17'W	2	15	0 YF	1.0
10/14	1333	08°15'S	140°37'W	2	4	0 ?	.5
10/14	1531	08°05'S	140°41'W	2	4	0 ?	.5
10/16	0625	08°08'S	139°36'W	2	9	0 DO	.5
10/16	1328	08°51'S	139°20'W	2	5	0 ?	1.0
10/16	1354	08°53'S	139°23'W	2	9	0 ?	-
10/17	1210	09°39'S	138°49'W	2	4	0 ?	1.0
10/17	1240	09°42'S	138°47'W	1	1	0 ?	-
10/18	0659	10°02'S	138°50'W	2	26	120 SJ	8.0
10/18	1354	10°23'S	138°37'W	3	6	0 ?	1.0
10/19	0702	10°18'S	138°53'W	2	8	0 ?	4.0
10/19	0726	10°16'S	138°56'W	2	10	42 SJ	7.0
10/19	0837	10°13'S	138°59'W	1	1	0 ?	.5
10/19	1012	10°03'S	139°09'W	2	2	0 ?	1.0
10/19	1042	10°01'S	139°09'W	1	6	0 ?	-
10/19	1055	09°59'S	139°11'W	1	2	0 ?	-
10/20	1427	09°27'S	140°10'W	2	5	0 YF and SJ	2.0
10/26	0757	09°13'S	137°11'W	1	2	0 SJ	1.0
10/26	1300	09°13'S	137°50'W	1	2	0 YF	.5
10/27	0921	09°46'S	139°38'W	2	8	0 YF and SJ	2.0
10/27	0946	09°50'S	139°34'W	7	26	43 SJ, 5 YF	16.5
10/27	1314	10°02'S	139°34'W	1	1	0 ?	1.0
10/27	1441	10°15'S	139°34'W	1	1	0 ?	1.0
11/3	0719	06°56'S	139°53'W	1	2	0 SJ	1.0
11/3	0807	07°00'S	139°57'W	2	6	0 SJ	2.0
11/3	0854	07°01'S	139°56'W	1	2	0 SJ	1.0
11/3	1244	07°31'S	139°52'W	1	30	182 SJ	9.0
11/4	0928	09°13'S	140°09'W	4	11	0 ?	1.0
11/4	1312	09°13'S	140°34'W	2	9	0 ?	2.0
11/4	1538	09°13'S	140°43'W	4	19	158 SJ	11.0
11/6	1210	09°15'S	141°21'W	4	22	75 SJ, 4 YF	6.5
11/10	0907	14°20'S	145°58'W	7	18	0 YF	10.0
11/10	1017	14°20'S	146°02'W	1	1	0 ?	.5
11/10	1034	14°23'S	146°04'W	2	7	0 ?	3.0
11/10	1145	14°29'S	146°05'W	1	18	144 YF	14.0
11/11	0625	14°33'S	146°07'W	2	9	4 SJ	1.0
11/12	1425	15°04'S	148°00'W	1	2	0 ?	1.0
11/12	1602	14°57'S	147°32'W	1	2	0 ?	.5
11/12	1628	14°56'S	147°38'W	5	26	415 SJ	18.0
11/19	0929	15°37'S	147°25'W	11	28	209 SJ	15.0

1/ SJ = skipjack, YF = yellowfin, DO = dolphin

Table 26.--Summary of pole-and-line fishing, Charles H. Gilbert cruise 35 (cont'd)

Date, 1957	Time, LT	Position		Number of passes	Number of minutes chummed	Number caught and species 1/	Amount of bait, buckets
		Latitude	Longitude				
11/24	1237	08°12'S	140°41'W	6	13	87 SJ	12.0
11/24	1341	08°12'S	140°41'W	1	25	480 SJ	18.0
11/25	0938	07°51'S	140°11'W	1	7	0 ?	5.0
11/25	1013	07°52'S	140°10'W	4	4	6 SJ	6.0
11/26	1305	08°56'S	139°29'W	1	2	0 ?	.5
11/26	1334	08°59'S	139°31'W	6	33	28 SJ	15.0
11/27	1138	09°42'S	138°47'W	2	3	0 ?	1.0
11/27	1210	09°45'S	138°46'W	4	8	0 ?	2.0
11/28	1154	10°01'S	138°51'W	1	3	0 ?	1.0
11/28	1254	10°08'S	138°50'W	6	20	233 SJ	14.0
11/29	0801	10°19'S	138°52'W	4	7	0 ?	3.0
11/29	1009	10°01'S	139°09'W	3	11	26 SJ, 2 YF	6.0

1/ SJ = skipjack, YF = yellowfin

Table 27.--Summary of pole-and-line fishing, Hugh M. Smith cruise 43

Date, 1958	Time, LT	Position		Number of passes	Number of minutes chummed	Number caught and species 1/	Amount of bait, buckets
		Latitude	Longitude				
1/18	1039	08°34'S	140°38'W	1	31	210 SJ	14.0
1/18	1435	08°15'S	140°43'W	2	18	0 SJ	-
1/18	1545	08°05'S	140°45'W	4	10	8 SJ	2.0
1/19	1040	07°50'S	140°14'W	5	18	0 SJ	-
1/19	1140	07°51'S	140°14'W	4	11	0 SJ	-
1/20	1203	08°52'S	139°16'W	1	3	0 ?	-
1/20	1324	08°48'S	139°14'W	1	1	0 ?	.5
1/20	1407	08°52'S	139°21'W	7	18	0 SJ	5.0
1/21	0739	09°10'S	139°14'W	1	5	0 SJ	1.0
1/21	0837	09°14'S	139°10'W	1	4	0 SJ	1.0
1/21	1000	09°18'S	139°03'W	1	5	0 YF	1.0
1/21	1025	09°20'S	139°00'W	5	16	4 SJ	3.0
1/21	1410	09°30'S	138°51'W	1	3	0 YF	1.0
1/22	1044	10°03'S	138°53'W	2	7	0 YF and SJ	1.0
1/22	1059	10°04'S	138°52'W	6	16	9 SJ, 1 YF	12.0
1/22	1537	10°19'S	138°28'W	1	3	0 YF and SJ	1.0
1/22	1621	10°27'S	138°30'W	1	2	0 YF and SJ	1.0
1/23	1106	10°00'S	139°23'W	6	16	0 SJ	8.0
1/25	0834	09°09'S	140°08'W	4	23	193 SJ	13.0
1/28	0748	09°13'S	138°18'W	4	7	0 ?	4.5
1/28	0908	09°16'S	138°12'W	1	1	0 SJ	.5
1/28	0932	09°15'S	138°06'W	1	3	0 ?	2.0
1/28	1340	09°19'S	137°35'W	3	14	0 SJ	9.0
1/28	1551	09°18'S	137°25'W	1	19	147 SJ	10.0
1/29	0943	09°10'S	136°29'W	1	12	45 SJ	15.0
1/29	1057	09°10'S	136°39'W	1	4	0 SJ	3.0
1/30	1238	09°12'S	139°24'W	3	12	0 ?	4.0
1/30	1402	09°10'S	139°31'W	5	16	0 SJ	12.0
1/30	1548	09°08'S	139°38'W	2	5	0 SJ	3.0
1/30	1633	09°08'S	139°38'W	1	23	92 SJ	10.0
1/30	1658	09°05'S	139°36'W	1	1	0 ?	1.0
2/1	0743	12°48'S	139°36'W	2	8	0 SJ	3.0
2/1	0953	12°34'S	139°40'W	1	5	5 SJ	3.5
2/1	1343	12°02'S	139°37'W	1	10	0 SJ	1.0
2/1	1527	11°52'S	139°40'W	3	19	91 SJ	8.0
2/2	1135	09°42'S	139°39'W	1	10	79 SJ	15.0
2/2	1425	09°17'S	139°41'W	1	3	0 SJ	.5
2/2	1436	09°14'S	139°04'W	3	10	0 SJ	1.5
2/5	1233	09°12'S	140°32'W	2	6	0 SJ	4.0
2/5	1313	09°12'S	140°34'W	1	3	0 ?	1.0
2/5	1717	09°09'S	140°45'W	1	2	0 SJ	1.0
2/6	0907	09°08'S	142°10'W	1	3	0 ?	1.0
2/7	1229	09°14'S	141°24'W	5	18	0 SJ	7.0
2/7	1426	09°12'S	141°16'W	2	25	137 SJ	15.0
2/9	0739	09°00'S	139°38'W	1	6	32 SJ	5.0
2/10	1054	06°05'S	139°31'W	1	4	0 SJ	1.0
2/10	1228	05°56'S	139°32'W	1	3	0 ?	.5
2/10	1316	05°56'S	139°27'W	1	4	0 ?	1.0
2/10	1346	06°00'S	139°45'W	3	17	108 SJ	7.5

1/ SJ = skipjack, YF = yellowfin

Table 28.--Summary of pole-and-line fishing, Charles H. Gilbert cruise 38

Date, 1958	Time, LT	Position		Number of passes	Number of minutes chummed	Number caught and species 1/	Amount of bait, buckets
		Latitude	Longitude				
2/27	0755	08°49'S	140°16'W	3	16	76 SJ and YF	10.0
2/28	1040	07°46'S	140°14'W	1	5	0 SJ and YF	2.0
2/28	1200	07°43'S	140°10'W	1	3	0 YF	1.0
2/28	1430	07°57'S	139°47'W	2	9	32 SJ and YF	7.0
3/1	0545	08°08'S	139°36'W	5	11	9 SJ	9.0
3/1	0745	08°21'S	139°30'W	4	9	0 SJ	2.5
3/1	0952	08°23'S	139°26'W	2	3	0 SJ and YF	1.0
3/2	0940	09°22'S	139°02'W	4	6	30 SJ	7.0
3/3	0945	10°01'S	138°52'W	4	15	229 SJ	14.0
3/3	1115	10°06'S	138°51'W	2	5	0 SJ	1.0
3/4	0955	10°04'S	138°59'W	4	6	0 SJ	5.0
3/4	1210	10°02'S	139°06'W	4	10	0 SJ	5.0
3/7	0900	09°10'S	140°00'W	5	11	0 SJ	4.0
3/7	0945	09°09'S	140°01'W	1	15	68 SJ	3.0
3/12	0937	14°44'S	146°39'W	1	17	87 SJ	15.0
3/13	0750	14°47'S	147°54'W	2	8	96 SJ	15.0
3/26	0625	10°11'S	139°33'W	2	4	0 SJ	3.0
3/28	0715	09°00'S	137°29'W	1	6	85 SJ	8.0
3/29	0712	08°46'S	139°45'W	2	5	0 SJ	2.0
3/29	0740	08°43'S	139°43'W	2	4	0 SJ	2.0
3/29	0810	08°42'S	139°42'W	2	4	0 SJ	1.0
3/29	1320	08°13'S	139°43'W	3	3	0 YF	1.0
3/29	1355	08°11'S	139°44'W	1	2	0 SJ	.5
3/29	1410	08°04'S	139°46'W	5	12	221 SJ	20.0
3/30	1205	05°51'S	139°38'W	1	6	0 SJ	5.0
3/31	1345	07°39'S	139°37'W	2	89	555 SJ	20.0
4/3	0950	09°08'S	140°16'W	1	2	0 ?	.5
4/3	1330	09°11'S	140°42'W	2	2	0 SJ	1.0
4/3	1550	09°10'S	140°50'W	1	3	0 SJ	1.0
4/6	0830	10°30'S	139°40'W	3	8	0 SJ and YF	4.0
4/11	1020	08°37'S	140°39'W	1	7	1 YF	4.0
4/11	1315	08°18'S	140°41'W	2	2	0 SJ	3.0
4/11	1450	08°12'S	140°40'W	2	7	72 SJ	10.0
4/12	1255	07°55'S	140°00'W	4	5	3 SJ	3.0
4/13	0740	08°21'S	139°34'W	2	2	0 ?	1.0
4/13	0950	08°31'S	139°33'W	2	2	0 ?	.5
4/13	1020	08°36'S	139°33'W	1	4	0 SJ	3.0
4/13	1335	08°51'S	139°31'W	3	3	0 SJ	3.0
4/14	0915	09°23'S	139°05'W	2	5	0 SJ	5.0
4/14	1020	09°06'S	139°01'W	1	3	0 SJ and YF	4.0
4/14	1205	09°34'S	138°54'W	1	1	0 ?	1.0
4/14	1325	09°46'S	138°47'W	3	10	0 SJ and YF	5.0
4/14	1514	09°49'S	138°50'W	1	1	0 SJ	1.0
4/15	0950	09°59'S	138°52'W	3	7	0 SJ and YF	4.0
4/15	1415	10°21'S	138°44'W	4	7	0 SJ	5.0
4/18	1045	09°32'S	139°52'W	6	33	216 SJ	20.0

1/ SJ = skipjack, YF = yellowfin

Table 29.--Summary of pole-and-line fishing, Hugh M. Smith cruise 45

Date, 1958	Time, LT	Position		Number of passes	Number of minutes chummed	Number caught and species 1/	Amount of bait, buckets
		Latitude	Longitude				
5/15	0925	09°12'S	139°37'W	2	5	0 ?	1.0
5/16	0838	09°10'S	136°47'W	2	21	115 SJ	7.0
5/16	1540	09°10'S	136°06'W	2	10	123 SJ	8.0
5/20	0915	09°18'S	142°38'W	1	10	53 SJ	7.0
5/21	1310	09°14'S	141°13'W	1	5	30 SJ	4.0
5/21	1433	09°14'S	141°04'W	3	14	17 SJ	5.0
5/24	0652	06°31'S	139°39'W	2	9	31 SJ	6.0
5/24	1045	06°08'S	139°36'W	1	2	0 SJ	.5
5/24	1155	06°02'S	139°36'W	1	5	0 SJ	.5
5/24	1232	05°58'S	139°36'W	5	18	8 SJ	5.0
5/24	1622	05°37'S	139°38'W	2	3	0 SJ	1.0
5/24	1740	05°28'S	139°39'W	1	1	0 SJ	.5
5/25	0950	07°11'S	139°42'W	2	10	51 SJ	7.0
5/25	1420	07°42'S	139°40'W	1	20	105 SJ	6.0
5/28	1137	12°17'S	139°42'W	1	5	0 SJ	1.0
5/28	0942	12°08'S	139°42'W	1	2	21 SJ	2.0
5/28	1322	12°27'S	139°42'W	2	2	0 SJ	1.0
5/29	0955	11°10'S	139°44'W	1	5	11 SJ	2.0
5/29	1255	10°52'S	139°45'W	2	3	0 ?	3.0
5/29	1337	10°51'S	139°44'W	3	5	0 ?	2.0
5/29	1514	10°43'S	139°42'W	1	1	0 ?	1.0
5/29	1540	10°38'S	139°40'W	1	2	0 SJ	1.0
5/29	1615	10°34'S	139°38'W	1	2	0 ?	1.0
5/29	1630	10°31'S	139°37'W	3	8	0 ?	7.0
5/29	1714	10°28'S	139°36'W	1	1	0 SJ	2.0
6/1	0956	08°43'S	140°33'W	2	10	22 SJ	6.0
6/1	1521	08°09'S	140°43'W	7	13	0 SJ	6.0
6/2	0718	07°53'S	140°44'W	2	4	0 SJ	3.0
6/2	0952	07°45'S	140°29'W	2	3	0 2/	1.0
6/2	1327	07°45'S	140°02'W	2	7	201 SJ	20.0
6/3	1110	08°38'S	139°22'W	5	13	0 SJ	4.5
6/7	1500	10°35'S	138°38'W	6	8	0 SJ	10.0

1/ SJ = skipjack

2/ School judged to be composed of "sun fish"

Table 30.--Pole-and-line caught skipjack and yellowfin length frequency by sex, Charles H. Gilbert cruise 35

| Date, 1957 | Latitude and Longitude | Sex | Species 1/ | Fork length range in millimeters | | |

Table 30.--Pole-and-line caught skipjack and yellowfin length frequency by sex, Charles H. Gilbert cruise 35 (cont'd)

| Date, 1957 | Latitude and Longitude | Sex | Species [1] | Fork length range in millimeters | | |

Table 31.--Pole-and-line caught skipjack and yellowfin length frequency by sex, Hugh M. Smith cruise 43

| Date, 1958 | Latitude and Longitude | Sex | Species[1/] | Fork length range in millimeters | | |

Table 32.--Pole-and-line caught skipjack length frequency by sex, Charles H. Gilbert cruise 38

| Date, 1958 | Latitude and Longitude | Sex | Fork length range in millimeters | | |

Table 33. --Pole-and-line caught yellowfin length frequency by sex, Charles H. Gilbert cruise 38

Date, 1958	Latitude and Longitude	Sex	Fork length range in millimeters																		Total
			485-494	505-514	575-584	605-614	645-654	655-664	695-704	705-714	715-724	725-734	735-744	745-754	755-764	765-774	775-784	795-804	885-894	915-924	
2/27	08°50'S	M	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	2
	140°16'W	F	-	-	-	-	-	-	-	-	1	-	-	1	-	1	-	-	-	-	3
2/28	07°57'S	M	-	-	-	-	-	-	1	1	-	1	1	-	-	2	-	-	-	1	7
	139°47'W	F	-	-	-	-	-	-	-	1	1	1	1	1	-	1	-	-	1	-	7
3/29	08°04'S	M	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1
	139°46'W	F	-	1	-	-	-	1	1	-	-	-	1	1	-	-	1	1	-	-	7
4/11	08°12'S	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1
	140°40'W	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/18	09°32'S	M	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	139°52'W	F	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
	Total	M	1	-	-	-	1	-	1	1	-	1	1	2	1	2	-	1	-	1	13
		F	-	1	1	1	-	1	1	1	2	1	2	3	-	2	1	1	1	-	19
	Grand total		1	1	1	1	1	1	2	2	2	2	3	5	1	4	1	2	1	1	32

Table 34. --Pole-and-line caught skipjack length frequency by sex, Hugh M. Smith cruise 45

| Date, 1958 | Latitude | Longitude | Sex | Fork length range in millimeters | | |

Table 35.--Summary of bait fishing for Marquesan sardines, Charles H. Gilbert cruise 35

Date, 1957	Locality	Amount seen per day, buckets	Number of sets		Catch, buckets
			Day	Night	
10/13	Taiohae, Nuku Hiva	-	4	-	100
10/23	Taiohae, Nuku Hiva	-	3	-	48
10/30	Taiohae, Nuku Hiva	-	2	-	58
11/7	Taiohae, Nuku Hiva	-	6	-	75
11/23	Taiohae, Nuku Hiva	-	3	-	158
11/28	Taa Huku, Hiva Oa	-	1	-	15
11/28	Hana Tetou, Tahu Ata	-	2	-	0
11/29	Taa Huku, Hiva Oa	-	1	-	2
12/2	Taiohae, Nuku Hiva	-	3	-	100
	Total		25	-	556

Table 36.--Summary of bait fishing for Marquesan sardines, Hugh M. Smith cruise 43

Date, 1958	Locality	Amount seen per day, buckets	Number of sets		Catch, buckets
			Day	Night	
1/15	Taiohae, Nuku Hiva	36-41	3	-	17
1/15	Taiohae, Nuku Hiva	-	-	1	0
1/16	Taiohae, Nuku Hiva	-	-	1	4
1/16	Taiohae, Nuku Hiva	3-4	1	-	Handful
1/16	Hanga Haa, Nuku Hiva	0	-	-	-
1/17	Anaho, Nuku Hiva	0	-	-	-
1/17	Tai Oa, Nuku Hiva	65	6	-	98
1/20	Hananai, Ua Huka	-	-	1	30
1/21	Taa Huku, Hiva Oa	-	-	1	18
1/22	Taa Huku, Hiva Oa	-	2	-	29
1/25	Haka Nai, Hua Pou	11	-	-	-
1/25	Tai Oa, Nuku Hiva	-	3	-	101
1/26	Taiohae, Nuku Hiva	40	4	-	81
1/27	Hanga Haa, Nuku Hiva	0	-	-	-
1/27	Haka Puuae, Nuku Hiva	0	-	-	-
1/27	Houmi, Nuku Hiva	50	-	-	-
1/27	Anaho, Nuku Hiva	0	-	-	-
1/27	Hatiheu, Nuku Hiva	0	-	-	-
2/2	Taiohae, Nuku Hiva	-	-	1	1
2/3	Taiohae, Nuku Hiva	157	6	-	56
2/3	Tai Oa, Nuku Hiva	0	2	-	1
2/4	Houmi, Nuku Hiva	0	-	-	-
2/4	Hanga Haa, Nuku Hiva	33	6	-	39
2/4	Haka Puuae, Nuku Hiva	-	2	-	14
2/4	Taiohae, Nuku Hiva	0	-	-	-
2/8	Hananai, Ua Huka	25	-	-	-
2/8	Hananai, Ua Huka	0	-	-	-
2/8	Vai Take, Ua Huka	0	-	-	-
2/12	Anaho, Nuku Hiva	0	-	-	-
2/12	Taiohae, Nuku Hiva	19	2	-	16
2/12	Taiohae, Nuku Hiva	20	-	2	17
2/13	Taiohae, Nuku Hiva	187	9	-	184
2/14	Taiohae, Nuku Hiva	21	3	-	4
2/14	Tai Oa, Nuku Hiva	0	3	-	4
2/14	Taiohae, Nuku Hiva	0	1	-	8
	Total		53	7	722

Table 37.--Summary of bait fishing for Marquesan sardines, Charles H. Gilbert cruise 38

Date, 1958	Locality	Amount seen per day, buckets	Number of sets		Catch, buckets
			Day	Night	
2/26	Taiohae, Nuku Hiva	15	5	-	25
2/26	Hakaui, Nuku Hiva	-	4	-	55
3/1	Hananai, Ua Huka	0	-	-	-
3/3	Taa Huku, Hiva Oa	0	1	-	0
3/3	Hana Tetou, Tahu Ata	-	1	-	41.5
3/4	Hana Tetou, Tahu Ata	0	-	-	-
3/5	Vai Tahu, Tahu Ata	0	-	-	-
3/8	Taiohae, Nuku Hiva	Scattered	8	-	25.5
3/8	Hakatea, Nuku Hiva	0	-	-	-
3/8	Hakaui, Nuku Hiva	Scattered	1	-	7
3/9	Taiohae, Nuku Hiva	0	1	-	0
3/9	Hanga Haa, Nuku Hiva	0	1	-	0
3/9	Haka Puuae, Nuku Hiva	0	-	-	-
3/9	Houmi, Nuku Hiva	0	-	-	-
3/9	Taiohae, Nuku Hiva	0	-	-	-
3/9	Hakaui, Nuku Hiva	-	1	-	4
3/23	Taiohae, Nuku Hiva	-	-	1	Few
3/24	Taiohae, Nuku Hiva	0	4	-	17
3/24	Hakatea, Nuku Hiva	0	-	-	-
3/24	Hakaui, Nuku Hiva	0	-	-	-
3/24	Bay Marquisienne, Nuku Hiva	0	-	-	-
3/25	Taiohae, Nuku Hiva	-	9	-	30.5
4/1	Hataivea, Nuku Hiva	0	-	-	-
4/1	Anaho, Nuku Hiva	0	-	-	-
4/1	Hatiheu, Nuku Hiva	0	-	-	-
4/2	Taiohae, Nuku Hiva	0	-	-	-
4/2	Hakatea, Nuku Hiva	0	2	-	9
4/2	Hakaui, Nuku Hiva	0	-	-	-
4/2	Taiohae, Nuku Hiva	-	-	2	4
4/9	Hanga Haa, Nuku Hiva	0	3	-	7
4/9	Haka Puuae, Nuku Hiva	0	-	-	-
4/9	Taiohae, Nuku Hiva	0	-	-	-
4/10	Taiohae, Nuku Hiva	Scattered	8	-	83
4/13	Hananai, Ua Huka	0	-	-	-
4/13	Hananai, Ua Huka	0	-	-	-
4/15	Motopu, Tahu Ata	0	-	-	-
4/15	Hana Tetou, Tahu Ata	-	2	-	43
4/16	Vai Tahu, Tahu Ata	0	-	-	-
4/19	Taiohae, Nuku Hiva	0	1	-	23
4/19	Hakaui, Nuku Hiva	0	-	-	-
4/19	Hakatea, Nuku Hiva	Scattered	2	-	42
4/20	Taiohae, Nuku Hiva	Scattered	3	-	34
	Total		57	3	450.5

Table 38.--Summary of bait fishing for Marquesan sardines, Hugh M. Smith cruise 45

Date, 1958	Locality	Amount seen per day, buckets	Number of sets		Catch, buckets
			Day	Night	
5/12	Taiohae, Nuku Hiva	-	4	-	35.0
5/12	Tai Oa, Nuku Hiva	-	3	-	5.0
5/13	Hanga Haa, and Haka Puuae, Nuku Hiva	-	6	-	17.0
5/14	Taiohae, Nuku Hiva	-	3	-	35.0
5/18	Taiohae, Nuku Hiva	-	4	-	15.0
5/18	Tai Oa, Nuku Hiva	-	3	-	26.5
5/22	Tai Oa, Nuku Hiva	-	4	-	21.5
5/22	Taiohae, Nuku Hiva	-	5	-	38.0
5/26	Taiohae, Nuku Hiva	-	6	-	22.5
5/31	Taiohae, Nuku Hiva	-	7	-	51.0
6/4	Taiohae, Nuku Hiva	-	1	-	0.0
6/6	Taa Huku, Hiva Oa	-	2	-	10.0
6/6	Hana Menu, Hiva Oa	-	2	-	4.0
6/11	Tai Oa, Nuku Hiva	-	1	-	0.0
6/11	Hanga Haa, Nuku Hiva	-	4	-	20.0
6/12	Taiohae, Nuku Hiva	-	1	-	1.0
	Total	-	56	-	301.5

Table 39.--Marquesan sardine length frequency by sex, Charles H. Gilbert cruise 35

Date, 1957	Position		Sex	Fork length range in millimeters										Total
	Latitude	Longitude		35-44	45-54	55-64	65-74	75-84	85-94	95-104	105-114	115-124	125-134	
10/13	08°56'S	140°05'W	M	-	-	-	-	-	-	6	2	-	-	8
			F	-	-	-	-	-	-	8	7	3	-	18
10/13	08°56'S	140°05'W	M	-	-	-	-	-	-	2	3	1	-	6
			F	-	-	-	-	-	-	2	14	1	1	18
			?	-	-	-	-	-	-	1	-	-	-	1
10/13	08°56'S	140°05'W	M	-	-	-	-	-	-	6	2	2	-	10
			F	-	-	-	-	-	-	12	5	2	1	20
10/13	08°56'S	140°05'W	M	-	-	-	-	-	3	8	1	-	-	12
			F	-	-	-	-	-	-	6	7	-	-	13
10/23	08°56'S	140°05'W	M	-	-	-	-	-	4	7	2	1	-	14
			F	-	-	-	-	-	-	8	4	-	-	12
10/23	08°56'S	140°05'W	M	-	-	-	-	-	-	8	1	-	-	9
			F	-	-	-	-	-	-	5	11	-	-	16
10/23	08°56'S	140°05'W	M	-	-	-	-	-	1	4	-	-	-	5
			F	-	-	-	-	-	1	6	2	-	-	9
10/30	08°56'S	140°05'W	M	-	-	-	-	-	5	6	2	-	-	13
			F	-	-	-	-	-	2	9	1	-	-	12
10/30	08°56'S	140°05'W	M	-	-	-	-	-	9	9	1	-	-	19
			F	-	-	-	-	-	-	6	-	-	-	6
11/7	08°56'S	140°05'W	M	-	-	-	-	-	6	14	-	-	-	20
			F	-	-	-	-	-	-	5	-	-	-	5
11/7	08°56'S	140°05'W	M	-	-	-	-	3	2	2	2	-	-	9
			F	-	-	-	-	-	1	10	1	-	-	12
11/23	08°56'S	140°05'W	M	-	-	-	-	2	11	10	-	-	-	23
			F	-	-	-	-	-	-	-	2	-	-	2
11/23	08°56'S	140°05'W	M	-	-	-	-	-	5	12	3	-	-	20
			F	-	-	-	-	-	-	3	1	1	-	5
11/23	08°56'S	140°05'W	M	-	-	-	-	1	7	10	-	-	-	18
			F	-	-	-	-	-	-	6	1	-	-	7
11/28	09°48'S	139°02'W	M	-	-	-	-	3	7	3	-	-	-	13
			F	-	-	-	-	-	2	-	1	-	-	3
			?	1	-	3	4	1	-	-	-	-	-	9
11/29	09°48'S	139°02'W	M	-	-	-	-	-	-	-	-	-	-	-
			F	-	-	-	-	-	1	-	1	-	-	2
			?	-	-	1	21	1	-	-	-	-	-	23
12/2	08°56'S	140°05'W	M	-	-	-	-	-	4	11	1	-	-	16
			F	-	-	-	-	-	1	6	-	1	-	8
			?	-	-	1	-	-	-	-	-	-	-	1
12/2	08°56'S	140°05'W	M	-	-	-	-	-	2	15	1	-	-	18
			F	-	-	-	-	-	-	5	2	-	-	7
		Total	M	-	-	-	-	9	66	133	21	4	-	233
			F	-	-	-	-	-	8	97	60	8	2	175
			?	1	-	5	25	2	-	1	-	-	-	34
		Grand total		1	-	5	25	11	74	231	81	12	2	442

Table 40.--Marquesan sardine length frequency by sex, Hugh M. Smith cruise 43

Date, 1958	Position		Sex	Fork length range in millimeters							Total
	Latitude	Longitude		65-74	75-84	85-94	95-104	105-114	115-124	125-134	
1/22	09°48'S	139°02'W	M	-	-	-	-	-	-	-	-
			F	-	-	-	3	-	-	-	3
			?	-	-	1	-	-	-	-	1
1/25	08°58'S	140°10'W	M	-	2	-	11	1	-	-	14
			F	-	-	1	4	2	-	-	7
			?	3	1	-	-	-	-	-	4
1/26	08°56'S	140°05'W	M	-	1	1	11	2	-	-	15
			F	-	-	-	1	7	-	-	8
			?	-	1	1	-	-	-	-	2
2/3	08°56'S	140°05'W	M	-	-	1	3	1	-	-	5
			F	-	-	-	-	4	2	-	6
			?	-	1	-	-	-	-	-	1
2/3	08°56'S	140°05'W	M	-	2	2	10	-	-	-	14
			F	-	1	-	2	4	1	-	8
			?	-	3	-	-	-	-	-	3
2/4	08°54'S	140°02'W	M	-	-	2	6	1	-	-	9
			F	-	-	-	3	10	2	-	15
			?	-	1	-	-	-	-	-	1
2/4	08°54'S	140°02'W	M	-	-	2	1	-	-	-	3
			F	-	-	-	6	12	4	-	22
2/4	08°54'S	140°02'W	M	-	-	10	7	-	-	-	17
			F	-	-	-	4	3	1	-	8
2/12	08°56'S	140°05'W	M	1	6	6	3	1	-	-	17
			F	1	2	3	-	-	1	-	7
			?	1	-	-	-	-	-	-	1
2/12	08°56'S	140°05'W	M	-	5	5	-	1	-	-	11
			F	-	-	1	-	4	-	-	5
2/13	08°56'S	140°05'W	M	1	1	3	-	2	-	-	7
			F	-	1	2	1	2	-	-	6
			?	-	2	-	-	-	-	-	2
2/13	08°56'S	140°05'W	M	-	-	1	5	5	1	-	12
			F	-	-	2	-	4	3	-	9
2/13	08°56'S	140°05'W	M	-	1	4	5	3	-	-	13
			F	-	-	2	3	4	2	1	12
2/13	08°56'S	140°05'W	M	-	-	-	11	1	-	-	12
			F	-	-	1	1	9	1	1	13
2/13	08°56'S	140°05'W	M	-	3	4	7	1	-	-	15
			F	1	1	1	1	6	-	-	10
2/13	08°56'S	140°05'W	M	-	-	1	15	5	-	-	21
			F	-	-	-	1	3	-	-	4
		Total	M	2	21	42	95	24	1	-	185
			F	2	5	13	30	74	17	2	143
			?	4	9	2	-	-	-	-	15
		Grand total		8	35	57	125	98	18	2	343

Table 41.--Marquesan sardine length frequency by sex, Charles H. Gilbert cruise 38

Date, 1958	Position		Sex	Fork length range in millimeters									Total
	Latitude	Longitude		45-54	55-64	65-74	75-84	85-94	95-104	105-114	115-124	125-134	
2/26	08°56'S	140°05'W	M	-	-	-	-	3	15	4	-	-	22
			F	-	-	-	-	-	3	-	1	-	4
2/26	08°58'S	140°09'W	M	-	-	-	2	3	4	3	-	-	12
			F	-	-	-	1	5	2	1	1	-	10
			?	-	-	-	3	-	-	-	-	-	3
2/26	08°58'S	140°09'W	M	-	-	-	2	3	2	4	1	-	12
			F	-	-	-	4	4	-	1	2	2	13
3/3	09°54'S	139°05'W	M	-	-	-	1	2	5	5	-	-	13
			F	-	-	-	-	-	5	7	-	-	12
3/8	08°56'S	140°05'W	M	-	-	-	3	9	1	1	-	-	14
			F	-	-	-	3	5	-	2	-	-	10
			?	-	-	1	-	-	-	-	-	-	1
3/8	08°58'S	140°09'W	M	-	-	-	-	3	6	5	-	-	14
			F	-	-	-	-	4	3	2	2	-	11
3/25	08°56'S	140°05'W	M	-	-	-	-	3	2	-	-	-	5
			F	-	-	-	-	-	4	1	2	-	7
4/10	08°56'S	140°06'W	M	-	-	-	-	6	3	-	-	-	9
			F	-	-	-	-	2	4	-	-	-	6
4/19	08°56'S	140°06'W	M	-	-	-	-	1	13	5	-	-	19
			F	-	-	-	-	2	3	1	-	-	6
4/19	08°58'S	140°09'W	M	-	-	-	-	-	2	8	1	1	12
			F	-	-	-	-	1	2	5	1	1	10
			?	1	1	1	-	-	-	-	-	-	3
			M	-	-	-	8	33	53	35	2	1	132
		Total	F	-	-	-	8	23	26	20	9	3	89
			?	1	1	2	3	-	-	-	-	-	7
		Grand total		1	1	2	19	56	79	55	11	4	228

Table 42.--Marquesan sardine length frequency by sex, Hugh M. Smith cruise 45

Date, 1958	Position		Sex	Fork length range in millimeters									Total
	Latitude	Longitude		35-44	45-54	55-64	65-74	75-84	85-94	95-104	105-114	115-124	
5/12	08°56'S	140°05'W	M	-	-	-	-	3	6	9	1	-	19
			F	-	-	-	-	2	2	2	-	-	6
5/12	08°56'S	140°06'W	M	-	-	-	3	11	4	1	-	-	19
			F	-	-	1	-	2	2	-	-	-	5
			?	-	-	-	1	-	-	-	-	-	1
5/12	08°56'S	140°06'W	M	-	-	-	2	11	1	-	-	-	14
			F	-	-	-	2	2	5	1	1	-	11
5/12	08°58'S	140°09'W	M	-	1	1	-	-	-	-	-	-	2
			F	-	1	5	-	-	-	-	-	-	6
			?	1	8	8	-	-	-	-	-	-	17
5/13	08°54'S	140°02'W	M	-	-	-	-	-	2	1	-	-	3
			F	-	-	-	-	-	3	9	3	4	19
5/13	08°54'S	140°02'W	M	-	-	-	-	2	2	3	-	-	7
			F	-	-	-	-	-	8	3	2	-	13
5/13	08°55'S	140°02'W	M	-	-	-	-	-	5	4	-	-	9
			F	-	-	-	-	-	1	5	10	-	16
5/18	08°58'S	140°09'W	M	-	-	-	-	1	6	7	2	-	16
			F	-	-	-	3	-	1	3	2	-	9
5/22	08°58'S	140°09'W	M	-	-	-	-	1	3	2	1	-	7
			F	-	-	-	1	2	6	2	-	1	12
			?	-	-	-	1	4	-	-	-	-	5
6/11	08°54'S	140°02'W	M	-	-	-	-	-	3	3	2	-	8
			F	-	-	-	-	-	3	8	6	-	17
6/12	08°56'S	140°06'W	M	-	-	-	-	1	1	13	-	-	15
			F	-	-	-	-	-	-	3	5	2	10
			M	-	1	1	5	30	33	43	6	-	119
		Total	F	-	1	6	6	8	31	36	29	7	124
			?	1	8	8	2	4	-	-	-	-	23
		Grand total		1	10	15	13	42	64	79	35	7	266

Table 43.--Record of daily sightings of bird flocks, scattered birds, and tuna schools, Charles H. Gilbert cruise 35

Date, 1957	Noon position		Flocks											Scattered birds								Tuna schools			
			Total number	Size			Composition																		
	Latitude	Longitude		< 10	10 - 50	> 50	Terns	Boobies	Bo'sun birds	Frigate birds	Petrels or shearwaters	Other		Albatross	Petrels or shearwaters	Boobies	Terns	Frigate birds	Bo'sun birds	Storm petrels	Other	Yellowfin	Skipjack	Unidentified	Little tuna
10/3	19°10'N	156°00'W	2	-	1	1	2	-	-	-	2	-		-	12	-	8	-	-	-	-	-	1	1	-
10/4	16°11'N	154°14'W	-	-	-	-	-	-	-	-	-	-		-	23	-	14	-	2	-	-	-	-	-	-
10/5	13°12'N	152°24'W	1	1	-	-	1	-	-	-	-	-		-	14	-	10	-	2	-	-	-	-	-	-
10/6	10°08'N	150°34'W	1	-	1	-	-	-	-	-	1	-		-	23	-	-	-	-	-	2	-	-	-	-
10/7	07°12'N	148°44'W	-	-	-	-	-	-	-	-	-	-		-	29	1	-	-	2	-	-	-	-	-	-
10/8	04°35'N	147°02'W	-	-	-	-	-	-	-	-	-	-		-	12	6	-	-	2	1	-	-	-	-	-
10/9	01°43'N	145°33'W	1	1	-	-	1	-	-	-	1	-		-	13	4	-	-	1	1	-	-	-	-	-
10/10	01°14'S	143°42'W	2	1	-	1	1	-	-	1	1	-		-	8	1	20	-	1	14	-	-	-	-	-
10/11	04°32'S	142°35'W	-	-	-	-	-	-	-	-	-	-		-	9	3	9	2	2	-	-	-	2	-	-
10/12	07°23'S	141°06'W	23	-	11	12	20	18	1	3	16	19		-	-	12	20	-	1	-	1	-	4	-	1
10/14	08°22'S	140°33'W	14	1	8	5	10	9	-	5	3	-		-	9	11	111	11	-	1	8	1	1	-	-
10/15	07°48'S	139°56'W	5	1	3	1	3	2	-	1	-	3		-	38	47	61	11	-	-	24	1	-	-	-
10/16	08°44'S	139°20'W	10	-	5	5	10	8	3	9	6	1		-	20	3	10	3	-	-	21	-	-	-	-
10/17	09°38'S	138°50'W	9	-	4	5	5	3	-	-	4	2		-	17	16	56	7	-	2	27	-	1	-	-
10/18	10°20'S	138°28'W	10	3	-	7	6	5	-	1	4	-		-	4	11	26	2	-	-	-	3	1	-	-
10/19	09°57'S	139°08'W	8	-	4	4	5	5	-	3	5	-		-	12	8	59	3	-	-	-	-	3	1	-
10/20	09°29'S	140°02'W	9	4	3	2	7	5	-	4	7	-		-	14	9	62	5	-	-	11	-	-	2	-
10/21	09°34'S	139°50'W	2	-	1	1	1	-	-	-	1	-		-	5	-	1	-	-	-	-	-	-	1	-
10/22	Taiohae, Nuku Hiva		3	2	1	-	1	1	-	-	1	-		-	8	4	11	2	-	-	-	-	-	-	-
10/24	09°07'S	139°04'W	11	1	7	3	9	9	-	3	9	-		-	18	15	27	1	-	-	-	-	1	1	-
10/25	09°16'S	136°15'W	3	1	2	-	2	1	-	2	-	1		-	5	2	8	11	-	-	-	-	-	-	-
10/26	09°13'S	137°44'W	4	1	2	1	3	-	-	1	3	-		-	24	3	50	7	1	1	5	1	1	-	-
10/27	09°56'S	139°33'W	9	-	4	5	5	3	-	2	4	2		-	14	3	20	-	-	-	-	1	3	-	-
10/28	09°27'S	139°32'W	3	1	2	-	1	-	-	-	1	-		-	1	-	37	-	-	2	-	-	-	-	-
10/29	11°14'S	139°25'W	2	1	1	-	-	-	-	-	-	-		-	23	2	61	-	-	5	-	-	-	-	-
10/30	08°56'S	140°05'W	2	-	2	-	2	-	-	-	1	1		-	1	1	7	-	-	-	-	-	-	-	-
11/1	08°20'S	139°35'W	5	-	2	3	3	3	-	1	3	-		-	31	3	26	4	2	-	8	-	-	1	-
11/2	06°05'S	139°39'W	4	1	2	1	4	2	-	2	-	4		-	11	1	6	2	-	-	-	-	-	-	-
11/3	07°24'S	139°49'W	11	2	4	5	9	8	-	4	3	7		-	2	3	12	2	-	-	-	-	4	-	-
11/4	09°13'S	140°27'W	14	1	11	2	14	4	-	5	8	10		-	18	6	32	1	-	-	33	-	-	-	-
11/5	09°11'S	143°11'W	1	1	-	-	-	-	-	-	-	1		-	14	-	27	4	1	-	-	-	-	-	-
11/6	09°15'S	141°23'W	12	-	10	2	11	6	-	-	11	9		-	16	-	36	10	-	-	-	1	1	1	-
11/8	09°47'S	141°07'W	12	2	10	-	12	2	-	2	4	9		-	11	3	8	-	1	-	1	-	-	-	-
11/9	12°31'S	143°32'W	1	1	-	-	-	-	-	-	-	1		-	11	-	8	6	1	-	-	-	-	-	-
11/10	14°29'S	146°05'W	7	-	6	1	3	-	-	1	6	6		-	8	-	16	-	-	-	19	-	-	-	-
11/11	14°43'S	146°55'W	8	1	5	2	5	-	-	1	6	3		-	8	-	66	2	1	-	3	-	1	-	-
11/12	15°07'S	148°12'W	5	-	1	4	5	5	-	1	5	-		-	55	9	48	1	-	-	-	-	2	-	-
11/13	15°38'S	148°10'W	2	2	-	-	2	1	-	-	-	-		2	5	16	27	-	-	-	-	-	-	-	-
11/18	17°30'S	149°35'W	-	-	-	-	-	-	-	-	-	-		-	3	2	3	-	-	-	-	-	-	-	-
11/19	15°30'S	147°17'W	15	-	1	14	4	15	-	14	13	12		-	5	35	13	2	1	-	8	-	4	1	-
11/20	13°40'S	144°40'W	7	1	2	4	7	5	-	2	7	5		-	19	2	17	-	-	-	-	-	-	1	-
11/21	11°22'S	142°24'W	6	2	2	2	3	1	-	3	5	4		-	5	3	34	2	-	-	-	-	2	-	-
11/22	09°04'S	140°12'W	13	1	7	5	13	6	-	-	7	7		-	8	3	17	-	-	-	-	1	3	4	-
11/24	08°17'S	140°39'W	13	-	5	8	12	11	-	6	9	2		-	33	13	84	7	-	-	22	-	2	1	-
11/25	07°56'S	140°01'W	8	-	2	6	4	4	-	3	4	2		-	20	16	25	24	-	-	4	-	-	1	-

Table 43.--Record of daily sightings of bird flocks, scattered birds, and tuna schools, Charles H. Gilbert cruise 35 (cont'd)

Date, 1957	Noon position		Flocks											Scattered birds								Tuna schools			
				Size			Composition																			
	Latitude	Longitude	Total number	< 10	10 - 50	> 50	Terns	Boobies	Bo'sun birds	Frigate birds	Petrels or shearwaters	Other		Albatross	Petrels or shearwaters	Boobies	Terns	Frigate birds	Bo'sun birds	Storm petrels	Other	Yellowfin	Skipjack	Unidentified	Little tuna
11/26	08°53'S	139°19'W	13	-	10	3	13	12	-	4	10	2		-	15	10	31	5	-	3	-	-	1	-	-
11/27	09°43'S	138°46'W	10	1	3	6	9	7	-	2	1	5		-	10	1	27	-	-	-	10	-	1	-	-
11/28	10°03'S	138°49'W	13	-	3	10	11	5	-	3	5	10		-	3	4	1	2	-	-	-	-	-	1	-
11/29	09°53'S	139°05'W	15	1	8	6	14	6	-	2	9	12		-	5	2	16	3	-	-	8	-	2	4	-
11/30	09°36'S	139°45'W	11	1	5	5	7	6	1	3	7	8		-	18	1	47	1	-	-	11	-	-	-	-
12/1	09°33'S	139°49'W	8	-	4	4	7	3	1	-	7	7		-	6	-	11	-	-	-	2	-	2	1	-
12/2	09°05'S	140°05'W	1	-	-	1	1	-	-	-	1	-		-	4	2	11	-	-	-	7	-	1	-	-
12/4	07°22'S	140°58'W	9	-	2	7	9	6	1	6	9	-		-	8	5	28	2	1	-	8	-	-	2	-
12/5	04°25'S	142°49'W	5	-	2	3	4	2	-	2	5	-		-	11	3	3	8	2	-	-	-	-	-	-
12/6	01°17'S	144°08'W	4	1	3	-	4	-	-	-	2	-		-	22	1	2	-	-	1	-	-	-	-	-
12/7	01°37'N	145°44'W	13	1	5	7	13	3	-	-	11	2		-	18	10	7	-	1	-	1	-	-	5	-
12/8	04°35'N	147°44'W	9	-	5	4	8	3	1	-	9	-		-	19	1	35	-	3	-	-	-	-	3	-
12/9	07°35'N	149°12'W	2	-	-	2	2	-	-	-	2	1		-	28	1	-	-	-	1	-	-	1	1	-
12/10	10°42'N	151°08'W	-	-	-	-	-	-	-	-	-	-		1	1	-	1	-	3	15	-	-	-	-	-
12/11	13°35'N	153°19'W	-	-	-	-	-	-	-	-	-	-		-	3	-	-	-	1	2	-	-	-	-	-
12/12	16°34'N	155°07'W	-	-	-	-	-	-	-	-	-	-		1	-	-	-	-	-	-	-	-	-	-	-
12/13	19°40'N	156°06'W	-	-	-	-	-	-	-	-	-	-		5	-	-	1	-	-	-	-	-	-	-	-
		Total	391	39	182	170	308	195	8	102	239	158		9	810	318	1,414	153	32	49	244	9	45	33	1

Table 44.--Record of daily sightings of bird flocks, scattered birds, and tuna schools, Hugh M. Smith cruise 43

Date, 1958	Noon position		Flocks										Scattered birds								Tuna schools		
			Total number	Size			Composition																
	Latitude	Longitude		< 10	10 - 50	> 50	Terns	Boobies	Bo'sun birds	Frigate birds	Petrels or shearwaters	Other	Albatross	Petrels or shearwaters	Boobies	Terns	Frigate birds	Bo'sun birds	Storm petrels	Other	Yellowfin	Skipjack	Unidentified
1/3	21°26'N	158°24'W	-	-	-	-	-	-	-	-	-	-	15	-	2	-	-	-	-	-	-	-	-
1/4	22°02'N	157°56'W	-	-	-	-	-	-	-	-	-	-	5	1	20	-	-	-	1	-	-	-	-
1/5	18°58'N	156°16'W	-	-	-	-	-	-	-	-	-	-	11	-	3	-	-	-	3	-	-	-	-
1/6	16°03'N	154°30'W	-	-	-	-	-	-	-	-	-	-	11	-	-	1	-	1	2	-	-	-	-
1/7	13°13'N	152°40'W	-	-	-	-	-	-	-	-	-	-	2	2	-	-	-	-	1	-	-	-	-
1/8	10°20'N	151°18'W	-	-	-	-	-	-	-	-	-	-	-	11	-	50	-	3	3	-	-	-	-
1/9	07°39'N	149°32'W	-	-	-	-	-	-	-	-	-	-	-	20	1	4	-	-	2	-	-	-	-
1/10	04°56'N	147°54'W	1	-	1	-	1	-	-	-	1	-	-	18	3	6	-	5	11	-	-	-	-
1/11	02°15'N	146°18'W	13	1	12	-	13	3	-	-	3	-	-	4	29	134	8	1	1	-	-	-	1
1/12	00°35'S	145°05'W	12	-	9	3	10	4	1	3	4	-	-	-	19	152	1	1	6	-	-	-	4
1/13	03°30'S	143°29'W	1	-	-	1	1	-	-	1	1	-	1	-	6	40	2	3	-	1	-	-	1
1/14	06°30'S	141°40'W	6	-	6	-	5	4	-	3	5	-	-	8	9	4	-	1	4	-	-	1	5
1/18	08°30'S	140°40'W	10	-	1	9	10	7	-	-	9	-	-	11	29	142	6	10	17	-	-	7	3
1/19	07°51'S	140°14'W	13	-	3	10	12	11	-	8	7	-	-	26	24	137	15	-	1	-	-	3	10
1/20	08°52'S	139°04'W	10	-	4	6	10	7	-	-	2	-	-	8	11	111	5	1	20	-	-	1	8
1/21	09°26'S	138°56'W	16	-	4	12	17	9	-	6	10	-	-	99	62	171	14	1	8	-	2	8	7
1/22	10°05'S	138°50'W	17	-	8	9	14	7	-	8	9	-	-	49	79	246	60	-	23	-	4	6	8
1/23	10°00'S	139°24'W	5	1	3	1	5	-	-	-	-	-	-	25	8	79	4	-	14	-	-	2	3
1/24	09°34'S	139°50'W	2	-	2	-	2	-	-	1	1	-	-	3	2	50	-	-	-	-	-	1	1
1/25	08°58'S	140°39'W	6	-	1	5	6	5	-	1	3	-	-	3	2	40	4	-	1	-	-	5	1
1/27	08°49'S	140°04'W	19	2	9	8	17	9	3	7	7	-	-	25	25	83	10	1	15	-	1	5	11
1/28	09°18'S	137°50'W	6	-	2	4	6	5	-	3	4	-	-	9	1	17	4	1	8	-	-	3	3
1/29	09°10'S	136°44'W	8	1	4	3	8	5	-	5	3	-	-	2	9	18	4	1	2	-	-	3	6
1/30	09°12'S	139°21'W	7	-	1	6	7	4	-	1	4	-	-	53	10	120	13	1	23	-	1	3	4
1/31	11°15'S	139°43'W	3	1	2	-	3	2	-	-	1	-	-	16	11	57	3	4	7	-	-	1	2
2/1	12°17'S	139°40'W	7	1	4	2	7	4	-	1	6	-	-	7	3	19	3	1	-	-	-	5	2
2/2	09°36'S	139°40'W	11	1	4	6	11	5	-	1	6	-	-	41	11	136	4	2	5	-	-	3	7
2/5	09°12'S	140°30'W	10	1	8	1	10	5	-	1	9	-	-	24	20	98	5	1	9	-	1	3	4
2/6	09°03'S	142°30'W	4	1	2	1	4	1	-	1	2	-	-	11	3	38	3	1	7	-	-	1	2
2/7	09°14'S	141°24'W	4	-	3	1	3	2	-	1	4	-	-	16	2	43	-	1	7	-	-	2	1
2/8	08°56'S	139°34'W	1	-	-	1	-	1	-	1	1	-	-	2	-	73	-	1	-	-	-	-	1
2/9	08°17'S	139°40'W	10	-	4	6	10	5	-	1	5	-	-	34	27	140	11	-	18	-	-	6	4
2/10	05°56'S	139°28'W	11	2	8	1	11	9	-	3	9	-	-	5	3	34	2	1	6	-	-	4	7
2/11	07°28'S	139°34'W	9	-	4	5	9	6	-	3	6	-	-	17	14	130	3	2	13	-	-	3	5
2/15	08°56'S	140°05'W	2	-	2	-	2	2	-	-	2	-	-	2	9	32	3	-	1	-	-	-	2
2/16	06°23'S	141°09'W	2	-	-	2	2	2	1	2	1	-	-	6	29	46	3	-	14	-	-	1	1
2/17	03°21'S	143°33'W	5	-	3	2	5	2	-	1	4	-	-	5	5	13	4	-	16	-	-	1	4
2/18	00°12'N	145°24'W	6	-	6	-	6	1	-	2	4	-	-	4	7	16	2	1	18	-	-	-	4
2/19	03°34'N	146°55'W	2	-	2	-	2	1	-	1	-	-	-	6	4	33	5	2	7	-	-	-	2
2/20	06°49'N	148°12'W	1	-	1	-	1	1	-	-	1	-	-	12	4	2	1	4	11	-	-	-	-
2/21	10°00'N	149°00'W	11	1	6	4	11	5	1	1	11	-	-	29	7	18	10	17	8	-	-	-	10
2/22	13°26'N	151°45'W	1	-	1	-	1	-	-	-	-	-	-	15	3	9	-	-	5	-	-	-	1
2/23	16°30'N	154°00'W	-	-	-	-	-	-	-	-	-	-	-	6	5	6	1	-	1	-	-	-	-
2/24	19°10'N	156°16'W	2	-	1	1	2	1	-	-	2	-	24	15	11	6	-	-	1	-	-	1	1
2/27	IGY Station		-	-	-	-	-	-	-	-	-	-	-	2	3	-	-	-	-	-	-	-	-
		Total	254	13	131	110	244	135	6	67	147	-	69	652	535	2,554	213	69	320	1	9	79	136

Table 45.--Record of daily sightings of bird flocks, scattered birds, and tuna schools, Charles H. Gilbert cruise 38

Date, 1958	Noon position		Flocks											Scattered birds								Tuna schools		
				Size			Composition																		
	Latitude	Longitude	Total number	<10	10 - 50	>50	Terns	Boobies	Bo'sun birds	Frigate birds	Petrels or shearwaters	Other		Albatross	Petrels or shearwaters	Boobies	Terns	Frigate birds	Bo'sun birds	Storm petrels	Other	Yellowfin	Skipjack	Unidentified
2/8	21°39'N	158°24'W	3	1	1	1	1	2	-	1	2	-		6	17	10	-	-	-	-	2	-	2	1
2/9	20°12'N	157°18'W	4	1	1	2	1	1	-	-	1	-		-	6	1	5	-	-	-	-	-	1	2
2/10	17°23'N	155°46'W	2	1	1	-	1	-	1	-	1	-		-	1	1	5	-	-	-	-	-	-	-
2/11	14°49'N	154°32'W	-	-	-	-	-	-	-	-	-	-		-	-	1	-	2	-	1	-	-	-	-
2/12	12°06'N	153°14'W	1	1	-	-	1	-	-	-	-	-		-	1	-	1	-	1	1	-	-	-	-
2/13	09°16'N	152°00'W	4	1	3	-	4	-	-	-	-	-		-	13	-	5	-	4	5	-	-	1	-
2/14	06°32'N	150°05'W	-	-	-	-	-	-	-	-	-	-		-	3	2	3	-	-	9	-	-	-	-
2/16	03°52'N	150°00'W	-	-	-	-	-	-	-	-	-	-		-	2	-	1	-	1	-	-	-	4	-
2/17	02°57'N	150°17'W	1	-	1	-	-	1	-	-	-	-		-	1	5	-	1	-	2	-	-	1	-
2/18	01°53'N	150°20'W	-	-	-	-	-	-	-	-	-	-		-	-	5	1	-	1	1	-	-	-	-
2/19	00°53'N	150°19'W	-	-	-	-	-	-	-	-	-	-		-	-	6	1	-	-	4	-	-	-	-
2/20	00°11'N	150°02'W	-	-	-	-	-	-	-	-	-	-		-	5	7	11	-	1	10	-	-	-	-
2/21	00°45'S	150°12'W	-	-	-	-	-	-	-	-	-	-		-	2	5	1	-	-	3	-	-	-	-
2/22	02°31'S	148°33'W	2	-	2	-	2	2	-	-	-	-		-	2	-	3	1	-	11	-	-	1	-
2/23	04°14'S	145°55'W	2	-	2	-	2	2	-	-	-	-		-	2	1	3	-	-	4	-	-	-	-
2/24	06°28'S	143°08'W	1	-	1	-	1	1	-	-	-	-		-	-	1	7	-	-	5	-	-	-	-
2/25	08°40'S	140°29'W	14	-	3	11	14	10	-	5	11	-		-	9	17	54	11	-	-	-	-	1	10
2/27	08°34'S	140°36'W	21	-	3	18	20	13	1	10	5	-		-	-	15	29	1	1	2	-	2 1/	7 2/	12
2/28	07°42'S	140°10'W	17	1	5	11	15	11	-	3	-	-		-	4	37	131	35	2	2	-	3 2/	2 1/	8
3/1	08°42'S	139°18'W	12	-	2	10	12	10	-	9	6	-		-	1	3	117	10	-	1	-	3 3/	4 3/	5
3/2	09°28'S	138°53'W	12	-	1	11	12	9	-	4	4	-		-	7	4	86	8	1	2	-	2 3/	5 3/	5
3/3	10°06'S	138°52'W	7	-	1	6	7	3	-	2	-	-		-	-	1	44	-	-	-	-	-	2	4
3/4	10°02'S	139°06'W	9	-	2	7	9	5	-	4	1	-		-	4	8	33	11	-	-	-	-	2	5
3/5	09°36'S	139°48'W	11	-	2	9	9	-	-	2	4	-		-	1	5	101	9	12	-	-	-	2	7
3/6	09°34'S	139°49'W	5	-	1	4	5	3	-	1	4	-		-	14	4	54	-	1	2	-	-	2	2
3/7	Taiohae, Nuku Hiva		14	-	3	11	14	4	-	1	7	-		-	28	5	105	2	-	-	-	-	6	7
3/10	10°31'S	142°06'W	5	-	2	3	5	1	-	2	4	-		-	2	1	21	4	5	1	-	-	-	2
3/11	12°42'S	144°18'W	3	-	1	2	3	-	1	1	1	-		-	2	-	27	-	-	4	-	-	-	2
3/12	14°46'S	146°53'W	9	-	-	9	8	8	2	5	6	-		-	3	-	90	1	-	-	-	-	3	6
3/13	14°57'S	147°56'W	5	-	-	5	3	3	-	1	3	-		-	-	6	76	1	-	-	-	-	1	4
3/14	15°23'S	148°08'W	5	1	2	2	4	4	-	1	2	-		-	13	14	30	2	2	2	-	-	-	2
3/19	17°22'S	149°25'W	1	-	-	1	1	1	-	-	-	-		-	-	8	6	-	-	1	-	-	-	1
3/20	15°24'S	147°14'W	10	-	3	7	10	3	-	4	-	-		-	2	3	27	7	1	-	-	-	-	7
3/21	13°20'S	144°60'W	8	-	5	3	8	2	-	2	1	-		-	1	-	24	-	-	-	-	-	-	3
3/22	11°09'S	142°52'W	3	-	1	2	3	1	-	1	1	-		-	8	2	9	1	-	1	-	-	-	2
3/23	09°24'S	140°43'W	21	-	2	19	21	21	-	13	11	-		-	11	3	57	9	-	-	-	-	2	17
3/26	09°10'S	138°58'W	6	-	3	3	6	3	-	3	4	-		-	7	8	72	3	2	5	-	-	2	1
3/27	09°12'S	136°36'W	1	-	-	1	1	1	-	1	-	-		-	9	4	17	2	-	-	-	-	-	1
3/28	09°01'S	137°54'W	4	-	1	3	4	2	-	4	2	-		-	3	2	34	2	-	7	-	-	1	2
3/29	08°20'S	139°40'W	12	-	2	10	11	9	-	7	6	-		-	8	16	60	4	-	5	-	1	5	4
3/30	05°52'S	139°38'W	4	-	1	3	4	3	-	2	1	-		-	13	7	20	-	-	4	-	-	1	2
3/31	07°25'S	139°40'W	5	-	4	1	5	2	-	-	2	-		-	406	23	44	-	1	6	-	-	1	-
4/3	09°10'S	140°32'W	11	-	5	6	11	3	-	3	4	-		-	32	8	92	3	-	-	-	-	4	4
4/4	09°08'S	143°02'W	2	-	2	-	2	-	-	2	1	-		-	1	4	21	-	-	2	-	-	1	-
4/5	09°09'S	141°22'W	11	-	9	2	10	6	-	2	3	-		-	13	4	56	-	-	1	-	-	2	2

1/ Mixed schools 2/ Includes 2 mixed schools 3/ Includes 1 mixed school

Table 45.--Record of daily sightings of bird flocks, scattered birds, and tuna schools, Charles H. Gilbert cruise 38 (cont'd)

Date, 1958	Noon position		Flocks											Scattered birds								Tuna schools		
				Size			Composition																		
	Latitude	Longitude	Total number	<10	10 - 50	>50	Terns	Boobies	Bo'sun birds	Frigate birds	Petrels or shearwaters	Other		Albatross	Petrels or shearwaters	Boobies	Terns	Frigate birds	Bo'sun birds	Storm petrels	Other	Yellowfin	Skipjack	Unidentified
4/6	10°04'S	139°41'W	9	-	5	4	9	5	-	1	4	-		-	37	8	131	2	-	5	-	1 4/	2 3/	2
4/7	12°31'S	139°47'W	6	-	5	1	6	3	-	2	3	-		-	21	-	34	-	3	1	-	-	-	1
4/8	10°56'S	139°43'W	4	-	4	-	4	-	-	1	-	-		-	36	3	73	-	1	4	-	-	-	-
4/9	Taipi Vaii, Nuku Hiva		3	-	2	1	3	-	-	-	-	-		-	2	7	64	-	-	-	-	-	1	-
4/11	08°32'S	140°40'W	11	-	1	10	11	8	-	3	2	-		-	54	67	532	4	-	-	-	1 4/	4 3/	6
4/12	07°50'S	140°06'W	6	-	2	4	6	2	-	3	-	-		-	13	55	139	5	2	1	-	-	1	3
4/13	08°44'S	139°32'W	7	-	3	4	7	5	-	1	2	-		-	8	6	69	2	-	2	-	-	2	2
4/14	09°34'S	138°54'W	12	-	2	10	12	7	-	1	4	-		-	3	26	114	2	-	3	-	2 1/	6 2/	4
4/15	10°12'S	138°50'W	7	-	2	5	7	5	-	3	1	-		-	3	2	85	9	-	-	-	1 4/	2 3/	3
4/16	09°57'S	139°07'W	2	-	-	2	2	2	-	-	1	0		0	39	14	113	1	-	1	-	-	1	1
4/17	09°33'S	139°50'W	6	-	1	5	6	3	-	3	4	-		-	15	7	118	2	1	3	-	-	1	4
4/18	09°32'S	139°54'W	10	-	2	8	10	3	-	6	5	-		-	9	3	10	-	-	-	-	-	4	5
4/19	Taiohae,	Nuku Hiva	6	-	2	4	6	3	-	1	-	-		-	-	8	46	-	-	2	-	-	2	3
4/21	08°58'S	140°11'W	16	-	-	16	15	13	-	7	14	-		-	2	12	45	5	-	-	-	-	3	13
4/22	06°19'S	141°50'W	12	-	2	10	12	3	-	3	4	-		-	5	7	24	-	1	1	-	-	2	8
4/23	03°30'S	143°32'W	-	-	-	-	-	-	-	-	-	-		-	10	3	67	-	-	2	-	-	-	-
4/24	00°41'S	145°25'W	5	-	4	1	4	1	-	-	-	-		-	10	4	16	-	-	1	-	-	2	1
4/25	02°14'N	147°08'W	-	-	-	-	-	-	-	-	-	-		-	13	1	4	4	1	-	-	-	-	-
4/26	05°05'N	148°41'W	-	-	-	-	-	-	-	-	-	-		-	53	1	14	-	2	-	-	-	-	-
4/27	07°50'N	150°12'W	1	-	-	1	1	1	-	-	1	-		-	12	-	-	-	1	4	1	-	-	1
4/28	10°42'N	151°58'W	-	-	-	-	-	-	-	-	-	-		-	14	-	3	-	-	3	-	-	-	-
4/29	13°38'N	153°38'W	-	-	-	-	-	-	-	-	-	-		-	10	-	2	-	-	4	-	-	-	-
4/30	16°42'N	155°08'W	-	-	-	-	-	-	-	-	-	-		-	13	-	3	-	-	1	-	-	-	-
5/1	19°33'N	156°36'W	7	-	3	4	6	1	-	2	6	-		3	41	15	5	15	-	10	-	-	3	1
		Total	398	7	118	273	377	215	5	133	149	-		9	1,080	506	3,295	181	48	152	3	16 5/	10 2 5/	188

1/ Mixed schools
2/ Includes 2 mixed schools
3/ Includes 1 mixed school
4/ Mixed school
5/ Includes 11 mixed schools

Table 46.--Record of daily sightings of bird flocks, scattered birds, and tuna schools, Hugh M. Smith cruise 45

Date, 1958	Noon position		Flocks										Scattered birds								Tuna schools		
			Total number	Size			Composition																
	Latitude	Longitude		< 10	10 - 50	> 50	Terns	Boobies	Bo'sun birds	Frigate birds	Petrels or shearwaters	Other	Albatross	Petrels or shearwaters	Boobies	Terns	Frigate birds	Bo'sun birds	Storm petrels	Other	Yellowfin	Skipjack	Unidentified
3/28	Honolulu,	Hawaii	-	-	-	-	-	-	-	-	-	-	8	7	-	12	-	-	-	-	-	-	-
3/29	19°17'N	156°13'W	4	2	2	-	4	1	-	1	3	-	6	24	2	22	-	-	-	-	-	-	2
3/30	16°58'N	153°54'W	-	-	-	-	-	-	-	-	-	-	3	26	-	6	-	-	7	-	-	-	-
3/31	14°56'N	151°46'W	-	-	-	-	-	-	-	-	-	-	-	16	-	2	-	-	4	-	-	-	-
4/1	12°56'N	149°32'W	1	-	1	-	1	-	-	1	1	-	-	31	-	5	-	-	3	-	-	-	1
4/2	10°50'N	147°18'W	-	-	-	-	-	-	-	-	-	-	-	21	-	-	-	1	12	-	-	-	-
4/3	08°48'N	144°56'W	-	-	-	-	-	-	-	-	-	-	-	51	-	1	-	1	22	-	-	-	-
4/4	06°50'N	142°43'W	-	-	-	-	-	-	-	-	-	-	-	93	2	2	-	2	12	-	-	-	-
4/5	05°03'N	140°02'W	3	-	3	-	3	2	-	-	3	-	-	66	-	6	-	1	55	1	-	1	-
4/6	03°02'N	140°01'W	-	-	-	-	-	-	-	-	-	-	-	8	-	-	-	-	10	-	-	-	-
4/7	01°02'N	139°59'W	-	-	-	-	-	-	-	-	-	-	-	9	-	-	-	-	6	-	-	-	-
4/8	00°24'S	140°05'W	-	-	-	-	-	-	-	-	-	-	-	7	-	-	-	-	3	-	-	-	-
4/9	02°38'S	140°02'W	-	-	-	-	-	-	-	-	-	-	-	3	-	2	-	2	1	-	-	-	-
4/10	03°48'S	140°12'W	-	-	-	-	-	-	-	-	-	-	-	6	1	-	-	1	1	-	-	-	-
4/11	00°04'S	139°59'W	-	-	-	-	-	-	-	-	-	-	-	14	-	-	-	1	43	-	-	-	-
4/12	00°01'S	140°00'W	-	-	-	-	-	-	-	-	-	-	-	8	-	-	-	-	1	-	-	-	-
4/13	00°02'S	140°00'W	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-
4/14	00°01'S	140°00'W	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	2	-	-	-	-
4/15	00°01'S	139°58'W	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	1	-	-	-	-
4/18	01°18'N	140°02'W	1	-	1	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	1	1	-
4/19	03°04'N	139°59'W	-	-	-	-	-	-	-	-	-	-	-	38	-	-	-	-	7	1	-	-	-
4/20	01°36'N	140°03'W	-	-	-	-	-	-	-	-	-	-	-	8	1	-	-	-	3	-	-	-	-
4/21	00°08'S	139°59'W	1	-	1	-	1	-	-	1	1	-	-	19	-	4	-	-	12	-	-	1	-
4/22	02°12'S	140°10'W	2	-	1	1	2	-	-	2	2	-	-	15	-	4	1	1	2	-	-	1	-
4/23	02°06'S	140°10'W	5	-	1	4	4	2	2	-	5	-	-	32	-	8	-	2	6	-	-	2	3
4/24	00°02'S	139°58'W	-	-	-	-	-	-	-	-	-	-	-	6	-	1	-	-	8	-	-	-	-
4/25	00°12'N	140°09'W	-	-	-	-	-	-	-	-	-	-	-	8	-	-	-	-	1	-	-	-	-
4/27	00°05'N	140°06'W	-	-	-	-	-	-	-	-	-	-	-	7	-	-	-	-	10	-	-	-	-
4/28	03°00'S	142°06'W	4	1	3	-	4	-	-	-	1	-	-	11	2	17	1	-	2	-	-	-	-
4/29	06°32'S	144°09'W	1	-	-	1	1	-	-	1	-	-	-	21	-	2	-	1	7	-	-	-	1
4/30	10°03'S	145°49'W	3	-	3	-	3	-	2	1	1	-	-	11	-	6	4	2	5	-	-	1	-
5/1	13°22'S	147°47'W	4	-	4	-	4	-	-	1	1	-	-	4	-	9	-	1	3	-	-	-	1
5/2	17°10'S	149°24'W	4	-	1	3	4	4	-	-	1	-	-	7	47	79	1	-	-	-	-	2	-
5/6	17°27'S	149°28'W	3	-	-	3	3	3	-	1	1	-	-	7	23	53	-	1	-	-	-	-	3
5/7	17°10'S	148°33'W	8	-	3	5	6	8	2	2	6	-	-	26	23	43	3	-	1	-	-	1	4
5/8	15°14'S	146°57'W	9	-	1	8	8	9	1	2	5	-	-	2	6	31	3	2	-	-	-	3	6
5/9	12°42'S	144°24'W	5	-	3	2	5	2	-	2	2	-	-	10	-	11	-	-	-	-	-	2	1
5/10	10°28'S	141°53'W	8	-	5	3	8	6	-	4	3	-	-	17	3	15	1	1	1	-	-	-	3
5/11	08°56'S	140°05'W	4	-	2	2	4	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
5/15	09°14'S	138°58'W	5	-	3	2	5	5	-	2	4	-	-	32	51	181	10	1	9	-	-	1	2
5/16	09°10'S	136°27'W	3	-	1	2	3	3	-	2	2	-	-	19	8	44	2	1	1	-	-	2	-
5/17	09°16'S	138°03'W	8	-	8	-	8	5	1	5	4	-	-	21	22	65	7	3	4	-	-	2	-
5/19	09°16'S	140°28'W	9	1	4	4	9	7	-	7	1	-	-	118	21	250	13	5	14	-	-	1	4
5/20	09°17'S	142°54'W	5	2	2	1	5	2	-	1	1	-	-	21	8	25	1	2	9	-	-	1	-
5/21	09°14'S	141°21'W	7	2	2	3	7	3	-	3	5	-	-	16	5	60	12	2	1	-	1[1/]	3[2/]	-

[1/] Mixed with skipjack. [2/] One school mixed with yellowfin.

Table 46.--Record of daily sightings of bird flocks, scattered birds, and tuna schools, Hugh M. Smith cruise 45 (cont'd)

Date, 1958	Noon position		Flocks										Scattered birds								Tuna schools		
				Size			Composition																
	Latitude	Longitude	Total number	< 10	10 - 50	> 50	Terns	Boobies	Bo'sun birds	Frigate birds	Petrels or shearwaters	Other	Albatross	Petrels or shearwaters	Boobies	Terns	Frigate birds	Bo'sun birds	Storm petrels	Other	Yellowfin	Skipjack	Unidentified
5/22	08°58'S	140°09'W	1	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
5/23	08°24'S	139°40'W	7	1	5	1	7	3	-	3	-	-	-	25	23	815	11	-	9	-	-	-	1
5/24	05°59'S	139°36'W	14	3	10	1	13	5	1	4	3	-	-	4	3	113	3	2	13	-	-	7	3
5/25	07°24'S	139°42'W	10	3	6	1	10	6	-	2	3	-	-	23	10	77	4	-	4	-	-	2	-
5/27	10°00'S	139°40'W	12	1	6	5	12	7	-	2	3	-	-	96	23	132	10	-	13	-	-	2	1
5/28	12°20'S	139°43'W	12	2	7	3	12	-	1	1	3	-	-	13	-	47	2	2	-	-	-	7	1
5/29	10°55'S	139°45'W	15	3	11	1	16	3	1	4	8	-	-	34	2	81	12	1	2	-	-	10	1
6/1	08°29'S	140°38'W	8	2	2	4	8	6	-	2	2	-	-	5	48	453	28	1	3	-	-	4	1
6/2	07°45'S	140°12'W	16	-	8	8	16	14	1	6	7	-	-	25	61	385	34	2	2	-	-	3	6
6/3	08°40'S	139°20'W	13	1	8	4	13	5	-	4	-	-	-	16	8	417	3	3	2	-	-	2	2
6/5	09°27'S	138°54'W	20	1	5	14	20	12	-	4	5	-	-	38	52	393	20	4	11	-	-	6	8
6/6	09°45'S	139°10'W	8	-	6	2	8	3	-	-	-	-	-	10	20	196	3	4	-	-	-	1	2
6/7	10°19'S	138°30'W	16	1	8	7	15	10	2	6	4	-	-	23	68	570	46	8	20	-	-	2	5
6/8	09°48'S	139°29'W	15	-	10	5	15	9	-	2	6	-	-	33	20	268	12	4	10	-	-	3	4
6/9	09°34'S	139°49'W	13	-	3	10	8	6	-	2	5	-	-	3	13	116	11	1	4	-	-	8	5
6/10	08°56'S	140°05'W	4	-	1	3	4	2	-	2	-	-	-	42	13	143	5	2	5	-	-	1	2
6/13	06°33'S	139°08'W	6	-	5	1	6	3	1	5	1	-	-	14	4	94	-	1	4	-	-	2	-
6/14	02°56'S	139°34'W	6	1	5	-	6	1	-	3	2	-	-	21	2	37	2	2	3	-	-	1	2
6/15	00°08'N	140°10'W	2	-	1	1	2	-	-	-	-	-	-	5	-	2	-	-	6	-	-	-	1
6/16	03°00'N	142°23'W	1	-	1	-	1	-	-	1	1	-	-	12	-	3	1	1	8	-	-	-	-
6/17	05°54'N	144°05'W	-	-	-	-	-	-	-	-	-	-	-	21	-	-	-	-	8	-	-	-	-
6/18	08°22'N	146°00'W	2	-	1	1	2	1	1	1	2	-	-	92	1	-	1	5	6	-	-	-	1
6/19	11°08'N	148°20'W	4	-	4	-	3	-	-	-	4	-	-	57	1	3	-	5	2	-	-	-	-
6/20	13°45'N	150°28'W	-	-	-	-	-	-	-	-	-	-	-	33	-	-	-	-	-	-	-	-	-
6/21	16°32'N	152°35'W	-	-	-	-	-	-	-	-	-	-	-	11	-	1	-	1	-	-	-	-	-
6/22	18°45'N	155°38'W	7	1	3	3	7	-	1	-	7	-	-	50	-	7	2	1	1	-	-	2	4
6/23	21°17'N	157°53'W	3	-	2	1	3	2	1	2	2	-	-	9	9	47	2	-	-	-	-	-	1
		Total	322	28	174	120	310	164	18	96	122	-	17	1,586	606	5,366	271	84	426	2	2 3/	89 3/	84

3/ Includes 1 mixed school.

Table 47.--Record of aquatic mammals sighted, Charles H. Gilbert cruises 35 and 38, Hugh M. Smith cruises 43 and 45

Vessel	Date	Time, LT	Position		Observation	Number
			Latitude	Longitude		
CHG-35	10/7/57	1620	06°41'N	148°24'W	Porpoise	12-24
"	10/12/57	1440	07°18'S	140°49'W	"	100
"	10/14/57	0600	08°58'S	140°11'W	"	12
"	10/14/57	0944	08°39'S	140°35'W	"	10
"	10/17/57	1338	09°46'S	138°46'W	"	12
"	10/18/57	0530	09°56'S	138°55'W	"	6
"	10/20/57	1040	09°31'S	139°54'W	"	20
"	10/29/57	1250	11°09'S	140°26'W	"	50
"	11/4/57	1305	08°13'S	140°31'W	"	3
"	11/4/57	1430	08°14'S	140°38'W	"	4
"	11/13/57	1734	16°13'S	148°31'W	Whale	1
"	11/24/57	0600	08°54'S	140°16'W	Porpoise	12-24
"	11/28/57	1605	10°24'S	138°43'W	"	2,000
"	11/29/57	1230	09°52'S	139°01'W	"	6
"	12/4/57	0615	07°57'S	140°42'W	"	200
"	12/13/57	1250	19°45'N	156°06'W	"	-
HMS-43	1/19/58	1350	07°52'S	140°02'W	"	250
"	1/21/58	1555	09°48'S	138°51'W	"	2
"	1/24/58	1632	09°26'S	140°06'W	"	50
"	1/24/58	1651	09°23'S	140°08'W	"	15
"	1/27/58	1330	08°47'S	140°00'W	"	15
"	1/30/58	1220	09°12'S	139°23'W	"	6
"	2/2/58	1400	09°19'S	139°40'W	"	4
CHG-38	2/9/58	1303	20°05'N	157°15'W	Whale	2
HMS-43	2/11/58	1220	07°30'S	139°34'W	"	1
"	2/11/58	1740	08°13'S	139°32'W	Porpoise	50
CHG-38	2/22/58	1332	02°35'S	148°26'W	"	2
HMS-43	2/22/58	1428	13°45'N	151°59'W	Whale	2
CHG-38	2/25/58	1120	08°37'S	140°31'W	Porpoise	15-25
"	2/27/58	0856	08°50'S	140°16'W	Pilot whale	60
"	2/27/58	0948	08°46'S	140°22'W	Porpoise	3
"	2/27/58	1110	08°49'S	140°35'W	"	100
"	2/27/58	1233	08°30'S	140°36'W	"	6
"	2/27/58	1250	08°28'S	140°37'W	"	30
"	2/27/58	1630	08°00'S	140°43'W	"	10
"	3/1/58	1429	08°51'S	139°28'W	"	6
"	3/2/58	1143	09°27'S	138°55'W	"	5
"	3/3/58	1115	10°03'S	138°52'W	"	5
"	3/4/58	1210	10°02'S	139°07'W	"	6
"	3/13/58	1500	14°54'S	147°45'W	"	4
"	3/23/58	1735	09°03'S	140°14'W	"	15
HMS-45	4/3/58	1120	08°47'N	144°54'W	Blackfish	4
"	4/3/58	1301	09°10'S	140°34'W	Porpoise	3
"	4/4/58	1509	09°09'S	143°17'W	"	1
"	4/5/58	1215	05°00'S	140°02'W	Whale	1
"	4/6/58	0520	09°19'S	140°41'W	Porpoise	6
"	4/6/58	0605	09°30'S	140°41'W	"	13
"	4/7/58	1325	12°40'S	140°40'W	Whale	4
"	4/7/58	1450	12°56'S	140°45'W	"	-
"	4/7/58	1700	12°50'S	139°46'W	Porpoise	-

Table 47.--Record of aquatic mammals sighted, Charles H. Gilbert cruises 35 and 38, Hugh M. Smith cruises 43 and 45 (cont'd)

Vessel	Date	Time, LT	Position		Observation	Number
			Latitude	Longitude		
HMS-45	4/7/58	1830	00°14'N	140°04'W	Sperm whale	1
"	4/9/58	0637	08°59'S	139°57'W	Porpoise	15
"	4/9/58	0726	08°56'S	139°59'W	"	20
"	4/11/58	0615	08°55'S	140°15'W	"	3
"	4/11/58	0630	08°54'S	140°16'W	"	2
"	4/11/58	0650	08°53'S	140°18'W	"	1
"	4/11/58	0700	08°52'S	140°19'W	"	2
"	4/11/58	0705	08°52'S	140°19'W	"	13
"	4/11/58	0922	00°33'S	140°01'W	"	1
"	4/11/58	1738	00°00'	140°00'W	"	50
"	4/13/58	1212	08°45'S	139°32'W	Pilot whale ?	-
"	4/13/58	1305	08°47'S	139°32'W	Porpoise	15
"	4/13/58	1735	00°00'	140°00'W	Blackfish	25
"	4/18/58	1318	-	-	"	15
"	4/25/58	1205	00°12'N	140°09'W	"	3
"	4/28/58	1740	03°48'S	142°35'W	Porpoise	500
"	5/25/58	1556	07°52'S	139°40'W	Humpback whale	4
"	5/27/58	1011	09°45'S	139°40'W	Porpoise	1
"	6/2/58	1500	07°51'S	139°55'W	"	50
"	6/5/58	1320	09°35'S	138°50'W	"	2
"	6/6/58	1145	09°47'S	139°12'W	"	30
"	6/7/58	1440	10°34'S	138°38'W	"	5
"	6/8/58	0656	10°18'S	138°55'W	"	-
"	6/8/58	1335	09°40'S	139°39'W	"	3
"	6/9/58	1547	09°28'S	140°05'W	"	1
"	6/10/58	1114	09°04'S	140°05'W	"	10
"	6/18/58	1755	08°59'N	146°31'W	Whale	1
"	6/23/58	0805	20°58'N	157°31'W	Porpoise	6